



DOE/EA-1604

**CONSTRUCTION AND OPERATION OF A POTABLE WATER  
LINE AT THE ROCKY MOUNTAIN OILFIELD TESTING  
CENTER/NAVAL PETROLEUM RESERVE NO.3,  
NATRONA COUNTY, WYOMING**

Final Environmental Assessment  
and  
Finding of No Significant Impact

**OCTOBER 2008**

U.S. Department of Energy  
Rocky Mountain Oilfield Testing Center/Naval Petroleum Reserve No 3.  
Casper, Wyoming







**Department of Energy**  
Washington, DC 20585

**Department of Energy**  
**Naval Petroleum Reserve 3 / Rocky Mountain Oil Field Testing Center**  
**907 N. Poplar Street, Suite 150**  
**Casper WY 82601**

October 8, 2008

**DOE/EA 1604**

**FINDING OF NO SIGNIFICANT IMPACT**  
**For the**  
**CONSTRUCTION AND OPERATION OF A POTABLE WATER LINE**  
**AT THE**  
**ROCKY MOUNTAIN OILFIELD TESTING CENTER/**  
**NAVAL PETROLEUM RESERVE NUMBER 3**  
**NATRONA COUNTY, WYOMING**

**ENVIRONMENTAL ASSESSMENT**

**AGENCY:** Department of Energy, Naval Petroleum Reserve 3, Rocky Mountain Oil Field Testing Center

**ACTION:** Finding of No Significant Impact

**SUMMARY:** The Department of Energy (DOE) is proposing to construct and operate an underground water line to connect the Rocky Mountain Oilfield Testing Center (RMOTC) site, within the Naval Petroleum Reserve No. 3 (NPR-3), to an existing potable water line which runs between Casper and Midwest, Wyoming. The NPR-3 is a 3,837-hectare (9,481-acre) DOE facility located about 56 kilometers (35 miles) north of Casper, Wyoming. This action would provide potable water to site personnel who currently depend upon supplies brought to the site by truck (the No Action alternative).

In accordance with DOE and National Environmental Policy Act (NEPA) implementing regulations, DOE is required to evaluate the potential environmental impacts of DOE facilities, operations, and related funding decisions. Three alternative routes with sub-route options were evaluated by DOE in the *Construction and Operation of a Potable Water Line at the Rocky Mountain Oilfield Testing Center/Naval Petroleum Reserve No. 3, Natrona County, Wyoming Environmental Assessment (EA)* (DOE/EA-1604).

**ENVIRONMENTAL IMPACTS**

The impacts under all alternatives would be limited to temporary surface and subsurface disturbance of 1 to 7 acres of land, depending upon alternative, along exiting right-of-ways (ROWs) or within existing roadways. From a biological perspective this impact would be small relative to the amount of undisturbed habitat available at NPR-3 for native species and grazing livestock. Some route alternatives and sub-route options would cross prairie dog colonies; however, the colonies have been devastated by disease over the past years and the impact to the existing colonies would be minimal. DOE will however, avoid impacting these habitats to the extent practicable.

Under all alternatives, disturbance would be temporary and mitigated by active reclamation with appropriate native seed mixes, and if necessary, weeds would be controlled under existing DOE reclamation procedures.

**COPIES OF THE FINAL EA ARE AVAILABLE FROM:**



DOE NEPA Compliance Officer  
DOE RMOTC/NPR-3  
U.S. Department of Energy  
907 N. Poplar Street, Suite 150  
Casper, WY 82601  
Fax: (307) 233-4851  
Toll Free Voice: 1-888-599-2200, Email: [RMOTCSWEA@rmotc.doe.gov](mailto:RMOTCSWEA@rmotc.doe.gov)

**FOR FURTHER INFORMATION ON THE DOE NEPA PROCESS CONTACT:**

Office OF NEPA Policy and Compliance  
U.S. Department of Energy  
1000 Independence Avenue, S.W.  
Washington, D.C. 20585  
(202) 586-4600 or (800) 472-2756

**DETERMINATION:**

On the basis of the information and analyses presented in the EA, DOE has determined that construction and operation of a waterline within any alternative route would not constitute a major Federal action significantly affecting the quality of the human environment, as defined by NEPA. Therefore, preparation of an environmental impact statement is not required, and DOE is issuing this Finding of No Significant Impact (FONSI). Based on this determination, DOE will contract with an engineering firm to provide design and cost information for each alternative. DOE will utilize the evaluations provided in the final EA, agency comments provided on the draft EA, and construction cost information to select a route in the near future when funding becomes available.

Issued in Casper, Wyoming this 8<sup>th</sup> day of October, 2008.

A handwritten signature in black ink, consisting of a large, stylized 'C' followed by a series of loops and a long horizontal stroke extending to the right.

CLARKE D. TURNER  
Director, NPR-3/RMOTC

## TABLE OF CONTENTS

<b>ACRONYMS AND ABBREVIATIONS .....</b>	<b>iii</b>
<b>1.0 INTRODUCTION.....</b>	<b>1</b>
1.1 The National Environmental Policy Act and Related Procedures.....	1
1.2 Background .....	2
1.3 Purpose and Need for Action .....	3
1.4 Proposed Action and Alternatives .....	3
1.4.1 Water Line Construction Activities .....	7
1.4.2 Operations .....	9
1.5 No Action .....	10
1.6 Comments on the Draft EA .....	10
<b>2.0 DESCRIPTION OF EXISTING ENVIRONMENT .....</b>	<b>11</b>
2.1 Land Features and Uses .....	11
2.1.1 Existing Land Uses .....	11
2.1.2 Land Ownership.....	12
2.1.3 Transportation.....	12
2.1.4 Topography.....	12
2.2 Soils.....	12
2.2.1 Regional Background .....	12
2.2.2 Soil Units.....	12
2.3 Potential Geologic Hazards.....	13
2.3.1 Surface Fault Rupture.....	13
2.3.2 Slope Stability .....	13
2.3.3 Subsidence .....	13
2.3.4 Erosion and Sedimentation.....	13
2.4 Biological Resources.....	13
2.4.1 Vegetation .....	13
2.4.2 Wildlife Resources .....	14
2.4.3 Aquatic Species .....	14
2.4.4 Threatened and Endangered Species .....	14
2.5 Surface Water .....	15
2.6 Noise .....	15
2.7 Cultural Resources.....	16
2.7.1 Cultural Resource Inventory .....	16
2.7.2 Cultural Resource Sensitivity.....	16
<b>3.0 ENVIRONMENTAL IMPACT OF THE PROPOSED ACTION.....</b>	<b>17</b>
3.1 Land Features and Uses .....	17
3.2 Geologic Hazards.....	17
3.3 Soils.....	18
3.4 Biological Resources.....	18
3.5 Surface Water .....	19
3.6 Noise .....	20
3.7 Cultural Resources.....	20
3.8 Accidents.....	20

3.9	No Action Alternative .....	21
3.10	Comparison of Action Alternatives .....	21
<b>4.0</b>	<b>CUMULATIVE IMPACTS .....</b>	<b>25</b>
4.1	Commitment of Resources and Short-Term Uses.....	25
4.1.1	Irreversible/Irretrievable Commitment of Resources .....	25
4.1.2	The Relationship between Local Short-Term Uses of the Human Environment and the Maintenance and Enhancement of Long-Term Productivity .....	25
<b>5.0</b>	<b>REFERENCES.....</b>	<b>27</b>
<b>APPENDIX A Scoping Letter and Distribution Lists .....</b>		<b>A-1</b>
<b>APPENDIX B Responses Received to Scoping Letter .....</b>		<b>B-1</b>
<b>APPENDIX C Comments and Responses .....</b>		<b>C-1</b>

## LIST OF TABLES

Table 1.	Comparison of Impacts Among Action Alternatives .....	23
----------	---	----

## LIST OF FIGURES

Figure 1.	RMOTC Regional Locator Map .....	2
Figure 2.	Alternative Route Map .....	5

## ACRONYMS AND ABBREVIATIONS

BLM	Bureau of Land Management
CEQ	Council of Environmental Quality
CFR	Code of Federal Regulations
dBA	A-weighted decibel
DOE	U.S. Department of Energy
EA	environmental assessment
EPA	U.S. Environmental Protection Agency
gpm	gallons per minute
HDPE	high-density polyethylene
L <sub>eq</sub>	equivalent sound level
mg/l	milligrams per liter
MOU	memorandum of understanding
NEPA	National Environmental Policy Act
NPDES	National Pollutant Discharge Elimination System
NPR	Naval Petroleum Reserve
NRHP	National Register of Historic Places
psi	pounds per square inch
RF	Ranching and Farming District
RMOTC	Rocky Mountain Oilfield Testing Center
ROW	right-of-way
SCJPB	Salt Creek Joint Powers Board
SWEA	site-wide environmental assessment
TD&E	testing, demonstration, and evaluation
USFWS	U.S. Fish and Wildlife Service
WDEQ	Wyoming Department of Environmental Quality
WGF	Wyoming Game and Fish

This page intentionally left blank.



## 1.0 INTRODUCTION

The Department of Energy (DOE) is proposing to construct and operate an underground water line to connect the Rocky Mountain Oilfield Testing Center (RMOTC) site, within the Naval Petroleum Reserve No. 3 (NPR-3), to an existing potable water line which runs between Casper and Midwest, Wyoming. The NPR-3 is a 3,837-hectare (9,481-acre) DOE facility located about 56 kilometers (35 miles) north of Casper, Wyoming. This action would provide potable water to site personnel who currently depend upon supplies brought to the site by truck.

In accordance with DOE and National Environmental Policy Act (NEPA) implementing regulations, DOE is required to evaluate the potential environmental impacts of DOE facilities, operations, and related funding decisions. The decision to use federal funds for this Proposed Action requires that DOE address NEPA requirements and related environmental documentation and permitting requirements.

In 1998, DOE issued the *Final Site-Wide EA for Preparation for Transfer of Ownership of Naval Petroleum Reserve No.3* (DOE/EA-1236) (DOE 1998). The Proposed Action that is the subject of this final EA (DOE/EA-1604) would be implemented in areas that were analyzed in the 1998 site-wide environmental assessment (EA). A No Action Alternative is also examined. Because the 1998 site-wide EA characterized in detail the affected environment of the site that is the topic of this final EA, that EA is incorporated into this EA by reference, and to the fullest extent possible this final EA tiers off the descriptions of the affected environment in the site-wide EA.

This final EA has been prepared under DOE's regulations and guidelines for compliance with NEPA.

### 1.1 THE NATIONAL ENVIRONMENTAL POLICY ACT AND RELATED PROCEDURES

The Council on Environmental Quality (CEQ) regulations for implementing the procedural provisions of NEPA (40 CFR Parts 1500-1508) and DOE's implementing procedures for compliance with NEPA (10 CFR Part 1021) require that DOE, as a federal agency:

- assess the environmental impacts of its proposed actions;
- identify any adverse environmental effects that cannot be avoided should a proposed action be implemented;
- evaluate alternatives to the proposed action, including a no action alternative;
- describe the relationship between local short-term uses of the environment and the maintenance and enhancement of long-term productivity; and
- characterize any irreversible and irretrievable commitments of resources that would be involved should the proposed action be implemented.

These requirements must be met before a final decision is made to proceed with any proposed federal action that could cause significant impacts to human health or the environment. This final EA is intended to meet DOE's regulatory requirements under NEPA and to provide DOE, the Bureau of Land Management (BLM) the State of Wyoming, and other agency decision-makers with the information they need to make informed decisions in connection with this Proposed Action. As part of its ongoing operations and maintenance responsibilities, DOE is currently replacing existing water lines that interconnect on-site RMOTC facilities which have become outdated and unreliable. DOE evaluated these

routine maintenance activities under its NEPA regulations (10 CFR 1021) and determined that such actions were categorically excluded from further evaluation under NEPA.

## 1.2 BACKGROUND

DOE/RMOTC manages NPR-3 as the only operating oil field in the continental United States owned by the U.S. government. This field is located in Natrona County, Wyoming, approximately 56 kilometers (35 miles) north of the City of Casper (Figure 1), and covers an area of 3,837 hectares (9,481 acres). Production at NPR-3 peaked in 1981 and has declined since it has become a mature stripper field.

As NPR-3 production has decreased, there has been an increase in use of the same facilities and personnel in support of government and private industry testing, demonstration, and evaluation (TD&E) of new oil field and environmental technologies. To meet this new TD&E mission, DOE established RMOTC in 1996 and is in the process of preparing a site-wide EA (SWEA) (DOE/EA-1583) to evaluate both the continued operations of oil extraction at NPR-3 as well as RMOTC's new TD&E mission over the next 5 years. For the purposes of this EA, the NPR-3 and RMOTC joint site will hereafter be referred to as the RMOTC site.

In accordance with CEQ's limitations on actions during the preparation of a NEPA document such as the SWEA (40 CFR Parts 1506.1), DOE has reviewed the Proposed Action that is the subject of this EA and determined that it is independent of the actions being assessed in the SWEA and would not prejudice the ultimate decisions to be supported by the SWEA. Therefore, preparation of this EA (DOE/EA-1604) for the construction and operation of a potable water line is justified.

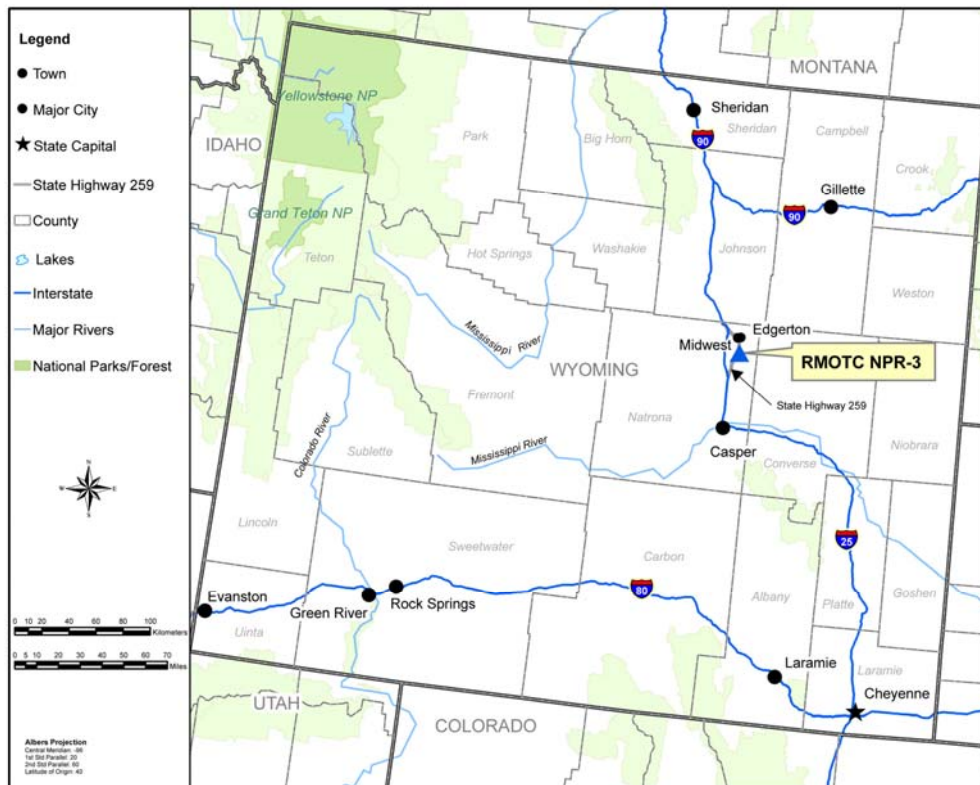


Figure 1. RMOTC Regional Locator Map

RMOTC's current on-site water system consists of a 30,300-liter (8,000-gallon) underground water storage tank located at the Lower Office, a pressure pump, and distribution lines to the Upper Office, the Technical Assurance Building, and the warehouse. Potable water is delivered to the site via a water-tank truck from the City of Midwest. The water is batch-treated with sodium hypochlorite. Potable drinking water is also provided by bottled water providers for those who prefer to drink bottled water. The water system supports the on-site RMOTC administrative operations but does not have the capacity to support the associated support buildings or future operations under consideration in RMOTC's site-wide improvements (assessed separately in the SWEA).

### **1.3 PURPOSE AND NEED FOR ACTION**

The purpose and need for this action is to improve the overall current and future operations of RMOTC by providing a safe and reliable potable water distribution system. Such a system would facilitate safer, more convenient, and less expensive operations in facilities routinely occupied by RMOTC staff.

### **1.4 PROPOSED ACTION AND ALTERNATIVES**

DOE proposes to install a 5-centimeter (2-inch) diameter high-density polyethylene (HDPE) water transmission line to extend from the existing water storage tank to a tie-in point in the existing Salt Creek Joint Powers Board (SCJPB) water line system, which passes the site entrance on the east side of Highway 259 (Figure 2). There are three alternative routing options:

- Alternative A would use the existing road right-of-way (ROW) to connect to the SCJPB system at Highway 259 and the access road to/from RMOTC, crossing private land at the site entrance and at several other points along the corridor where DOE's ROW crosses onto private lands via easement agreements. This alternative is DOE's preferred alternative.
- Alternative B would begin just slightly north of DOE's entrance within the ROW of existing roads on lands managed by the BLM, avoiding the private lands at RMOTC's entrance before merging with the Alternative A route just inside RMOTC's property.
- Alternative C would diverge from Alternative A and the existing road ROW to avoid crossing private lands, thus precluding the need for easement agreements. Alternative C could be combined with Alternatives A or B to make a complete corridor from Highway 259 to the storage tank at the Lower Office.

Water line installation would generally proceed along, or adjacent to, existing roadway alignments for Alternatives A and B, although Alternative B would follow an old, unused roadbed for less than a mile across BLM's land before merging with the site's road ROW. Alternative C would be constructed in areas outside of existing ROWs.

The Alternative A water line would be approximately 6,353 meters (20,843 feet) long from the interconnection to the water tank. Alternative A can be divided into three segments (Figure 2):

- Segment A1, from Highway 259 to the intersection with Alternative B, is 1,269 meters (4,164 feet) long.
- Segment A2, from the intersection with Alternative B to the intersection with Alternative C, is 2,272 meters (7,454 feet) long.
- Segment A3, from the intersection with Alternative C to the Upper and Lower Offices, is 2,812 meters (9,225 feet) long.

1

This page intentionally left blank.



# NPR-3 Proposed Waterline

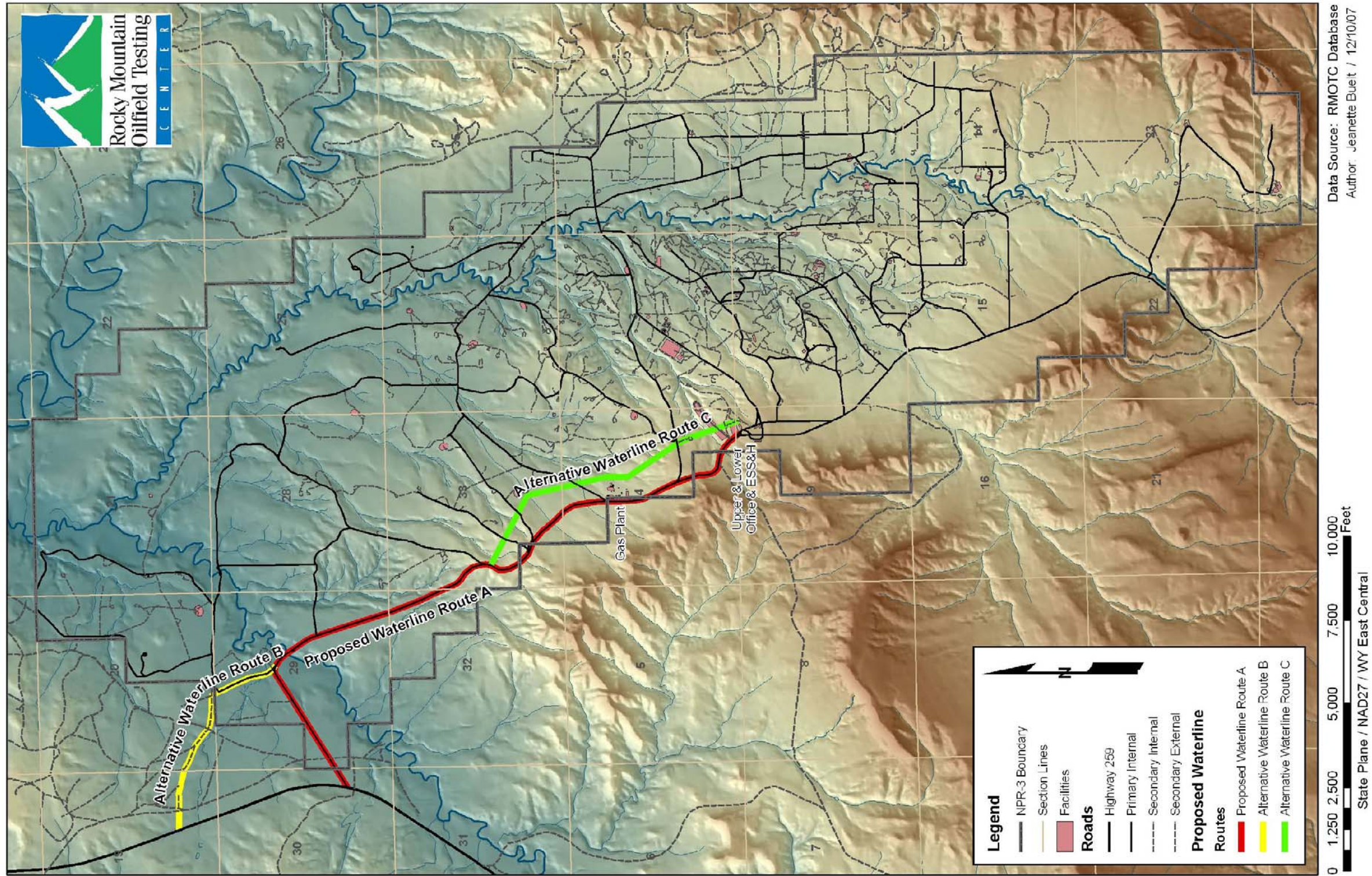


Figure 2. Alternative Route Map



1

2

This page intentionally left blank.

Under Alternative B, a segment 1,935 meters (6,348 feet) long would bypass Segment A1.

Under Alternative C, a segment 2,780 meters (9,120 feet) long would bypass Segment A3.

Alternatives B and C are not complete corridors without at least one segment of Alternative A (see Figure 2). They have been developed to provide DOE alternatives to its preferred route, Alternative A, should easement negotiations with the private landowners on Segments A1 or A3 be unsuccessful.

Based on the analyses in this EA and other factors, DOE could choose among the following combinations to make a complete route for the proposed water line:

- All three segments of Alternative A
- Segments A1 and A2 + Alternative C
- Alternative B + Segments A2 and A3
- Alternative B + Segment A2 + Alternative C

Because the water line would generally travel uphill from Highway 259, a booster pump station would likely be required near the RMOTC gas plant for any of the alternatives. The specific location for the booster pump would be determined as part of the detailed design.

Based on the estimated needs of RMOTC's future operations, the water line would be designed to provide 80 gallons per minute (gpm) at a pressure of 200 pounds per square inch (psi). This estimate is based on the current pressure of the SCJPB water line. The maximum capacity of the SCJPB water line is 290 gpm (<http://waterplan.state.wy.us/plan/powder/techmemos/muniuse.html>). This limit is apparently imposed by the pump capacity of the booster station north of Casper. The pipeline (and water) changes ownership from the Central Wyoming Regional Water System (<http://www.wyowater.com>) to the SCJPB at this booster station. Communications with the Central Wyoming Regional Water System indicated that monthly water sales to SCJPB peaked in July 2007 at 6.7 million gallons, or roughly 150 gpm. Therefore, current summer (high demand) usage is approximately 52 percent of capacity (Doyle 2007).

#### **1.4.1 Water Line Construction Activities**

Preconstruction activities would include acquiring ROW easements from either the adjacent private landowners along Alternative A or from the BLM along Alternative B; surveying the pipeline corridor; and obtaining the necessary permits and approvals for construction to begin. Alternative C would not require negotiation of easements because it is wholly on DOE property.

Under all alternatives, water line construction activities would involve clearing and grading, trenching, hauling and stringing the pipe, pipe-bending, line-up, welding and field coating, lowering and tying-in, hydrotesting, backfilling, cleaning up, and restoring disturbed areas. Construction of the proposed water line would require a temporary construction ROW varying in width from 6 to 12 meters (20 to 40 feet). Construction activities would take approximately 6 months and would employ two crews consisting of approximately 25 workers per crew from the available workforce in the region.

*Clearing and Grading:* Surface preparation for the underground water line would require the use of backhoes, trenchers, and tractors. Topsoil from ROW construction would be stockpiled for subsequent reclamation activities at designated locations along the road at 270-meter (300-yard) intervals, depending on the type of trenching designated by the contractor. Each stockpile would be lined, and best management practices would be implemented to reduce or eliminate the transport of soil and conserve topsoil for subsequent reclamation use. Likely stockpile locations would be areas in Section 29 near the

main gate, in the southwest corner of Section 33, and in Section 4 near the existing gas plant. Lay-down and stockpile areas for Alternatives B and C could require the use of areas in Section 29 north of the main gate. A work area (lay-down area) would also be established near the main gate for the storage of materials, equipment, and a portable work trailer for the water line contractor and the temporary storage of spoil (material excavated from the trench) and salvaged topsoil.

*Trenching and Boring:* In general, the depth from the ground surface to the top of the underground water line pipe would be between 1.2 and 1.8 meters (4 and 6 feet). The trench would be approximately 1 meter (3 feet) wide. The presence of substructures may require deeper installation of the water line in some locations. Final water line burial depths would be determined in accordance with applicable rules and regulations.

*Pipeline Placement:* This activity would include lineup, lowering, and pipe stringing. The pipe would be transported by truck from designated stockpile areas and placed into position along the ROW in preparation for subsequent line-up and assembly. Individual spreads of pipe would be strung along the ROW, parallel to the centerline of the trench, and arranged so they are easily accessible to construction personnel. Stringing activities would be coordinated with the progress of the trenching and pipe-laying crews to minimize the length of construction time.

After the pipe was assembled, it would be lined up and placed on supports as a continuous pipeline along the side of the trench. Before the pipe was lowered into the trench, the joints would be coated and any faults in the water line would be repaired. The pipe would then be inspected to ensure that:

- the trench was of adequate depth to achieve the minimum cover required over the pipe;
- the pipe was properly placed on the bottom of the trench;
- all bends conformed to the alignment of the trench; and
- the pipe was not damaged.

Lowered sections of the pipeline would be “tied in” or joined in the trench. Tie-ins would be necessary at all crossings or special construction areas where the water line cannot be joined aboveground.

*Hydrostatic Testing:* Once the water line was installed and before backfilling began, the contractor would hydrostatically test the water line in accordance with applicable environmental and safety standards. Hydrostatic testing would involve filling the completed water line with water and keeping it at the requisite pressure throughout the test. No major equipment would be required for testing. This potable test water would be either discharged to the site’s existing septic system or, if residual chlorine levels were below 5 milligrams per liter (mg/l) (as required by Wyoming’s General Permit for Temporary Discharges [WDEQ 2007a]) routed through the existing wastewater treatment facility, and subsequently discharged to Little Teapot Creek.

*Backfill/Cleanup:* After the water line was successfully hydrotested, the trench would be backfilled. Any excess excavated material unsuitable for backfill would be disposed of on-site at the existing land farm in accordance with applicable regulations. Completed construction areas would be cleaned and returned, as nearly as is practical, to original conditions. Disturbed areas would be reseeded in accordance with RMOTC’s restoration procedures (DOE/RMOTC 2007). The affected access road to and from RMOTC would be reestablished, and minor improvements consisting of light grading and placement of gravel along the roadway and water line corridor would be implemented.

*Potability Testing and Certification:* Before the water was used as a drinking water source, the entire water line would be flushed with chlorinated water. As with the hydrostatic test waters, this disinfectant



water would be discharged in compliance with Wyoming Department of Environmental Quality (WDEQ) requirements to either the septic system or wastewater treatment facility.

### **Water Line Crossings**

Water line construction for the segment crossing Teapot Creek would be completed by attaching the segment of the water line to the existing bridge truss or girder. This segment of the water line would be designed to prevent water from in-line freezing. This method of crossing the creek would preclude additional site disturbance activities at the crossing and reduce vegetation clearance within established work areas. These relatively small work areas would be established on each side of the drainage for pipe lay-down areas and staging.

### **Private Lands Crossings**

Under Alternative A, where the water line's proposed route crosses private land at the site entrance and intermittently along the western border of RMOTC (see Figure 2), a temporary construction easement and a permanent construction easement (for water line and maintenance activities) would be obtained from the landowners. The temporary easement would vary from 6 to 12 meters (20 to 40 feet) wide, and the permanent easement would be 3 to 6 meters (10 to 20 feet) wide.

### **BLM Lands Crossings**

Under Alternative B, DOE would prepare a memorandum of understanding (MOU) and negotiate an easement with the BLM and, if necessary, any private company holding an oil/gas lease on this area.

### **Booster Station**

A booster station would be necessary as part of the Proposed Action under all alternatives. As envisioned, the booster station would be located in the general area of the RMOTC gas plant. An option to the gas plant location would be an area adjacent to the administrative area. An area of approximately 46 square meters (500 square feet) would be fenced to prevent unauthorized access. Equipment would include electrical control panels, automation and instrumentation, and an electrically powered centrifugal pump. This equipment would be enclosed in a metal building with a concrete floor slab. If soil conditions required, the pump and motor would be mounted on concrete pillars drilled, and structurally separate from, the floor slab. Approximately 150 meters (500 feet) of new overhead power line would be constructed.

### **Construction Schedule**

Construction of the water system would expect to take approximately 6 months. Construction is planned to begin in summer 2008 and be completed by late fall 2008.

### **1.4.2 Operations**

Under the Proposed Action, operational personnel would be limited to existing maintenance and monitoring personnel currently employed on the site. Periodic water quality sampling and monitoring would be implemented in accordance with DOE standard operations procedure E5403.12 (Potable Water Monitoring) (DOE/RMOTC 2006) as well as standard water quality sampling and testing conducted by SCJPB for new water line connections. A Doppler weather monitoring system would be installed and monitored by RMOTC personnel during operations at the booster pump to measure precipitation levels in the project area.

**1.5 NO ACTION**

Under the No Action Alternative, the water line would not be built. RMOTC would continue to operate with potable water trucked to the site.

**1.6 COMMENTS ON THE DRAFT EA**

Comments on the draft EA were received from the United States Fish and Wildlife Service, the Wyoming Department of Agriculture, the Wyoming State Engineers Office, and the Wyoming Game and Fish Department. DOE has reviewed and considered all comments in finalizing this EA and provided responses to each comment in Appendix C of this final EA. Additionally, DOE will further considered these agency comments in the selection of a final route alternative.

## 2.0 DESCRIPTION OF EXISTING ENVIRONMENT

Sections 2.1 through 2.7 describe existing environmental conditions that have the potential to be affected under the Proposed Action. Because all three alternative routes are very close to one another, this description of the existing environment applies for all the alternatives. This information is based on DOE's most recent site-wide EA (DOE 1998), a review of literature and aerial photographs, contact with regulatory agencies, and a site reconnaissance in November 2007. The environmental resources described in this section are land features and uses, soils, potential geologic hazards, biological resources, surface water, noise, and cultural resources.

CEQ and DOE NEPA regulations state that descriptions of the existing environment should focus on those elements of the environment that might be affected. Due to the nature of the Proposed Action (installation and operation of a potable water line almost exclusively on DOE's property), there would be no potential to affect the RMOTC site's geology, groundwater, air quality, socioeconomics, demographics, human health, and environmental justice. Therefore, these resources are not described in this section.

### 2.1 LAND FEATURES AND USES

#### 2.1.1 Existing Land Uses

The land potentially affected by the Proposed Action is located in an unincorporated area of Natrona County, Wyoming, south of the towns of Midwest and Edgerton. With the exception of short segments of Alternative A on private lands just off-site, and parts of Alternative B on BLM land, all proposed activities would be implemented on DOE's RMOTC property (see Figure 2).

Natrona County has established the area around RMOTC as a Ranching and Farming District (RF). Under Natrona County land use policy, all unincorporated lands in the county area are given a general designation until an application is filed for specific zoning designation (Miller 2007). Within a RF district, oil and gas development is considered to be an allowable use by right, upon issuance of a Use Certificate (Miller 2007).

Similarly, BLM lands adjacent to RMOTC are under lease and are actively developed for oil and gas extraction. Generally, the land in the surrounding area is used for oil and gas production intermingled with agricultural uses, primarily sheep and cattle grazing. The area is also used for hunting, primarily big game, in the fall; however, hunting is prohibited within RMOTC boundaries. Recreational use of off-road vehicles may also occur; however, there are no defined trails for this use in the project vicinity.

The land at the project site is currently used primarily for oil and gas development (such as exploration, pumping, processing, and transport), as well as grazing, sheep trailing, and wildlife habitat (BLM 2007). The proposed project site overlies an existing gas/oil field, and RMOTC operates existing oil and gas production facilities at the site.

The BLM does not formally designate lands in this area for a specific use; however, BLM guidelines do require that new pipeline facilities follow existing pipeline, transmission, or transportation alternatives to the extent feasible or available (BLM 2007).

## **2.1.2 Land Ownership**

The RMOTC site is surrounded primarily by private, BLM, and state lands. The state-owned lands adjacent to the site are located along the southwest and northern boundaries of NPR-3. The BLM lands are adjacent to the northwest boundary of the site.

Private land ownership surrounding NPR-3 is registered by five cattle ranchers. One of the ranchers currently leases land on NPR-3 to graze sheep and other livestock. Alternative A would cross less than 0.8 kilometer (0.5 mile) of privately owned land (see Figure 2). The portions of privately owned lands that would be crossed by Alternative A are registered to Mr. Shepardson along Segment A1 and Mr. Owens along Segment A3. DOE is currently negotiating easement agreements with both landowners.

## **2.1.3 Transportation**

U.S. Highway 259, a four-lane paved highway, serves the RMOTC area and passes adjacent to the towns of Midwest and Edgerton. U.S. Highway 259 lies to the west of the NPR-3 and is used primarily for regional traffic and local oil and gas operations. At RMOTC's entrance, SCJPB's main water line runs on the east side of the highway, adjacent to and parallel to the highway.

The road that serves RMOTC is a two-lane, heavy-duty, improved dirt road covered with a gravel road base. This road would also serve as access to the proposed alternative corridors. Numerous unimproved dirt roads and utility corridors used primarily for on-site utility maintenance, access to existing oil and gas facilities, and livestock transport would be crossed by the proposed alternative corridors.

## **2.1.4 Topography**

The proposed alternative corridors are located on the southern portion of the Salt Creek formation. The terrain along the proposed alternative corridors is generally gently rolling hills with locally steep-sided stream banks. The proposed corridors would connect to the existing Technical Assurance Building at an elevation of approximately 1,548 meters (5,078 feet), crossing Little Teapot Creek. The proposed corridors begin at Highway 259 at the RMOTC access road at an elevation of 1,608 meters (5,275 feet).

## **2.2 SOILS**

### **2.2.1 Regional Background**

Soils in central Wyoming are formed from a wide variety of geologic material, ranging from rock (residuum) to those formed in unconsolidated materials deposited by wind (Aeolian deposits), water (alluvium), gravity (colluvium), and ice (glacial till). These parent materials, along with variable climate, topography, vegetation, and land management practices, have produced soils with diverse characteristics.

### **2.2.2 Soil Units**

Soils along the proposed alternative corridors belong to the Cadoma-Renohill-Samday soil unit. These soils are a clay loam, a rich, friable soil with a mixture of sand, silt, and clay. The soils are largely derived from sodic parent materials and are highly alkaline and saline. These soils range from shallow to deep on nearly level to steep topography. There are no prime or unique farmlands in the alternative corridors.

## **2.3 POTENTIAL GEOLOGIC HAZARDS**

Potential geologic hazards in the area that could affect the proposed water line include surface fault rupture, slope instability, subsidence, and erosion and sedimentation. The following subsections describe the potential for these hazards to occur.

### **2.3.1 Surface Fault Rupture**

The proposed alternative corridors do not cross any known active or potentially active faults, and no recent surface displacement has occurred. However, the presence of an active or potentially active fault cannot be ruled out.

### **2.3.2 Slope Stability**

The stratigraphy along the proposed alternative corridors may be prone to swelling and failure due to the presence of bentonite clay. This type of stratigraphy is associated with landslides in central Wyoming. Slope instability may occur along and across the creek bank at Teapot Creek.

### **2.3.3 Subsidence**

Subsidence may occur due to groundwater or oil/gas extraction. The proposed alternative corridors traverse the northwest portion of the oil and gas field. However, subsidence due to oil/gas extraction is highly unlikely due to the depth of production and the highly cemented and competent characteristics of the underlying stratigraphy. The proposed corridors would not traverse active oil/gas production areas.

### **2.3.4 Erosion and Sedimentation**

Potential erosion along the proposed alternative corridors could occur by sheet flow, debris flow, and channel erosion during a time of flooding or flash flooding. Sedimentation could occur during and after heavy rains and snowmelt. Potential hazards such as pipe exposure and/or direct damage to the water line could occur due to channel erosion where the pipeline crosses drainages.

## **2.4 BIOLOGICAL RESOURCES**

A review of literature and existing data and the results of a reconnaissance survey were used to characterize the existing biological resources along the proposed alternative corridors. BLM maps (which included locations and boundaries of critical big-game winter range, raptor nest sites, and prairie dog towns) and the Wyoming Game and Fish (WGF) Department's database (WGF 2001) were obtained and reviewed before conducting an aerial reconnaissance.

Additional information on wildlife species was obtained from personal communications with biologists from the BLM, WGF, and the U.S. Fish and Wildlife Service (USFWS). Previous biological studies along the Anadarko pipeline alternatives were also reviewed to further characterize the local flora and fauna.

### **2.4.1 Vegetation**

Mixed grass prairie, desert shrub, and wetland/riparian vegetation communities are found within the proposed alternative corridors.

1 *Mixed Grass Prairie.* The mixed grass prairie contains a large portion of weedy annual grasses and forbs.  
2 The community is dominated by cheatgrass, Japanese brome, tansymustard, kochis, and introduced  
3 annual grasses. Other vegetation species associated with this community include western wheatgrass,  
4 bluebunch wheatgrass, needle and thread, bluebunch wheatgrass, wildrye, crested wheatgrass, and Indian  
5 ricegrass. The mixed grass prairie community that would be traversed by the proposed alternative  
6 corridors is poorly developed where the route follows areas previously disturbed by existing roadways.

7 *Desert Shrub.* Silver sagebrush and greasewood is the predominant shrub of this community. Other  
8 vegetation species associated with this community include rabbitbrush, saltbrush, and broom snakeweed.  
9 Areas of this vegetation type are generally bisected with arroyos and areas of saline soils.

10 *Wetlands and Riparian Vegetation.* As determined by the site Wetland Delineation Report (BKS 2005),  
11 wetlands along the proposed alternative corridors exist only at the Teapot Creek crossing. The wetland  
12 community is characterized by wiregrass, Great Basin wildrye, timothy, and reedgrass. The riparian  
13 vegetation that would be crossed by the alternative corridors is poorly developed, generally consisting of  
14 grasses and forbs species. Willows and narrow-leaf cottonwoods also occur within the ROWs in the form  
15 of isolated patches. The study area also supports isolated patches of aquatic vegetation at the Teapot  
16 Creek crossing.

#### 17 **2.4.2 Wildlife Resources**

18 *Raptors.* Raptors commonly occur as year-round residents in the study area. Species include the golden  
19 eagle and the red-tailed hawk. Summer breeders include American kestrel, northern harrier, Swainson's  
20 hawk, ferruginous hawk, and prairie falcon. Winter residents also include the bald eagle. Due to the  
21 absence of suitable habitat within the proposed alternative corridors, raptors are unlikely to be residents.  
22 There are no known nest sites within the proposed areas of disturbance.

23 *Big Game.* Two big-game species have been recorded in this habitat: mule deer and pronghorn antelope.  
24 According to BLM maps, the proposed alternative corridors are outside of crucial big-game habitat.  
25 Moreover, personnel from the WGF do not consider the area crossed by the proposed alternative corridors  
26 to be significant big-game habitat.

27 *Other Avian Species of Special Concern.* Avian species of concern that may occur in the immediate area  
28 surrounding the RMOTC include the Canada goose, sandhill crane, long-billed curlew, and various  
29 species of ducks. According to existing literature, these designated areas were noted to be outside of the  
30 project area. In addition, according to WGF personnel, a nesting colony of great blue herons is located  
31 approximately 1.8 kilometers (1.1 mile) (at its nearest location) from the study area (nesting occurs in  
32 spring and early summer). Foraging and nesting habitat for other avian species is not believed to be  
33 crucial near the proposed alternative corridors.

#### 34 **2.4.3 Aquatic Species**

35 The WDEQ classifies Teapot Creek as a 3B tributary to Salt Creek. 3B drainage is characterized as  
36 having low productivity with a designated use of aquatic life excluding fish species (RETEC 2004).

#### 37 **2.4.4 Threatened and Endangered Species**

38 No federally threatened or endangered species are expected to occur within the proposed alternative  
39 corridors due to the lack of viable habitat for listed species potentially occurring in the region (USFWS

2007; DOE 1998). Based on a review of the WGF database, as well as results of the aerial surveys, no active nests of federally threatened or endangered species occur within the proposed alternative corridors.

Black-footed ferrets are not expected to occur within the proposed alternative corridors. Black-footed ferrets are dependent upon the presence of extensive populations of white-tailed or black-tailed prairie dogs. The extent and densities of prairie dog towns along the proposed alternative corridors are insufficient to require further studies (USFWS 2007; DOE 1998).

One threatened plant species, the Ute ladies'-tresses, has been identified as potentially occurring at RMOTC in seasonally moist or wet meadows (USFWS 2007; DOE 1998). However, previous site surveys of all potential habitats found no plants on the RMOTC site (DOE 1998). DOE intends to avoid Teapot Creek, (the only intermittently wet area along the proposed corridors) by bridging over the creek. Therefore, there would be no potential to affect this species even if it were present.

## **2.5 SURFACE WATER**

Surface water in the project area is limited to intermittent runoff into Teapot Creek from natural precipitation events. Due to the arid nature of the project area, natural drainage paths are ephemeral to intermittent in nature. Several miles downstream from the project area, Teapot Creek is an intermittent tributary draining into Salt Creek and subsequently into the Powder River drainage system. Little Teapot Creek located more than a mile from all alternative corridors, flows continuously due to the discharge of permitted wastewater from RMOTC operations and constitutes the majority of the off-site flows. It converges with the Teapot Creek at the northern end of the RMOTC site and ultimately merges into Salt Creek a few miles north of the site, which subsequently becomes a tributary of the Powder River many miles north of the site.

Due to the arid climate of the Wyoming Basin, all of the drainages at the site and crossed by the proposed alternative corridors are ephemeral to intermittent. When flows do occur in these drainages, they are from springs or in response to snowmelt runoff and thundershowers. Surface water from these washes is lost mainly from percolation or evapotranspiration. Surface flow from washes does not contribute significantly to any drainage system (WDEQ 2007b).

The proposed study area is not within a floodplain (FEMA 1986).

## **2.6 NOISE**

The RMOTC site is located in an industrialized rural environment. Background noise sources in this environment include the NPR-3 operations (compressor stations, general oil extraction activities, and gathering, stripping, and compression facilities) and traffic on Highway 259 and other site roads.

Ambient noise levels in such industrialized rural areas are generally on the order of 45 to 60 A-weighted decibels (dBA) (decibels weighted to compensate for the sensitivity of the human ear). For comparison, noises measured at 45 dBA or higher can result in sleep interference, noises measured at 60 to 70 dBA can impair speech communications, and noises measured higher than 85 dBA can cause temporary or permanent hearing loss. A normal conversation is measured at approximately 60 to 80 dBA. There are no residents or other sensitive noise receptors within approximately 24 kilometers (15 miles) of the project area.

## **2.7 CULTURAL RESOURCES**

Cultural resources include archaeological, historical, and ethnographic sites. These resources are protected by a variety of state and federal laws and regulations; the most significant regulations pertain to the NEPA, the National Historic Preservation Act, the Archaeological Resources Protection Act, and the American Indian Religious Freedom Act. Compliance with these regulations requires (1) the assessment and comparison of project impacts; (2) a cultural resource inventory (including fieldwork and archival research) of the ROW; (3) the evaluation of the significance of the sites that could be impacted; (4) the determination of project effects on significant sites; and (5) the implementation of prudent and feasible measures to avoid or mitigate adverse effects to significant sites. During the course of conducting project-related activities, the State Historic Preservation Officer would be consulted.

### **2.7.1 Cultural Resource Inventory**

Numerous cultural resource surveys have included parts of the proposed alternative corridors. A compilation of all of the cultural resource surveys, inventories, and associated work and activities for the potentially affected areas is presented in several site surveys (Pronghorn Archaeological Services 1995). A records search, literature review and field survey were conducted in May 2008 to identify known cultural or historical resources within or near the proposed alternative corridors. The literature review and subsequent field survey found no cultural resource sites along the proposed alternative corridors (Shire 2008). Also, no standing historic structures or potential historic structure locations were identified.

### **2.7.2 Cultural Resource Sensitivity**

Available research, including archaeological site descriptions, suggest that much of the area was occupied during most of the cultural prehistoric times of Western North America. Much of the evidence occurs in the form of lithic sites in and around buttes and ridges and along the various drainages. Most of these sites consist of cobbles, fire-altered rock, cores, and stone debitage. Additionally, cultural features such as hearths and habitation foundations are found at these sites. Cultural resources could be encountered during surface and subsurface disturbance activities along the proposed alternative corridors. Based on recent field assessments of the alternative routes, no resources eligible for nomination to the National Register of Historic Places (NRHP) exist on the routes or in areas that would be disturbed by pipeline installation (Shire 2008).



### **3.0 ENVIRONMENTAL IMPACT OF THE PROPOSED ACTION**

Sections 3.1 through 3.8 describe the environmental consequences that could result from water line construction on any segments of Alternatives A, B, or C. Where impacts would not differ among the alternative segments, the discussion is representative of all segments. Where the impacts would differ among the segments, those differences are so noted. The impacts of the No Action Alternative are discussed in Section 3.9. As noted in Section 1.4, DOE may choose among several combinations of Alternatives A, B and C to develop a complete route; the comparative evaluation of all such combinations is provided in Section 3.10.

#### **3.1 LAND FEATURES AND USES**

Alternative A would be approximately 6.3 kilometers (3.9 miles) long. Under Alternative B, the segment bypassing Segment A1 would be approximately 1.9 kilometers (1.2 miles) long. Under Alternative C, the segment bypassing Segment A3 would be approximately 2.3 kilometers (1.4 miles) long.

Construction would occur primarily within a corridor with a maximum width of 9 meters (30 feet), except when additional work space would be needed for construction of parallel water lines. The total area of disturbed land within the ROW of existing roads would be approximately 5.8 hectares (14.4 acres) under Alternative A, with Segment A1 affecting 2.9 acres, Segment A2 affecting 5.1 acres, and Segment A3 affecting 6.4 acres. Under Alternative B, along the segment bypassing Segment A1, approximately 1.8 hectares (4.4 acres) within the ROW of existing roads would be disturbed. Under Alternative C, along the segment bypassing Segment A3, approximately 2.5 hectares (6.3 acres) would be disturbed, all of which would be outside the ROW of existing roads.

Under Alternative A, with respect to the segments of the water line that cross private land, DOE is currently in negotiations with the landowner to acquire easements for both the construction and operation phases of the Proposed Action. Land disturbed from construction would be restored, and the owner would be compensated. With respect to those areas of the water line that traverse BLM lands, an MOU and a separate easement would be negotiated. No impacts on land ownership in the project area are anticipated.

Under any alternative, impacts on grazing would be short-term and would involve a very small portion of available grazing land. Grazing and sheep trailing activities would be precluded in the construction area. Following the completion of project construction, the water line corridor would be revegetated and grazing would be allowed to return to pre-construction levels. Existing fences would be restored. No impacts on grazing in the project area are therefore anticipated.

No alternative would traverse any major highways or county roads. Lightly traveled unpaved roads would be crossed using open-cut excavation and would therefore require temporary closure or minor rerouting on-site. Such short-term impacts would occur only on-site, and no traffic or circulation impacts are anticipated as a result of project construction under any alternative.

#### **3.2 GEOLOGIC HAZARDS**

##### **Surface Fault Rupture**

Surface fault rupture in the area is not expected to occur if the Proposed Action were implemented.

## **Slope Instability**

Under any of the alternatives, potential impacts associated with slope failure are not expected based on the limited amount of disturbed steep slopes. Based on the limited amount of construction activities on the slopes of Teapot Creek, which would be same under all alternatives, impacts due to slope failure are not expected.

## **Subsidence**

Because of the relatively short duration of construction, no impacts due to subsidence are expected under the Proposed Action.

## **Erosion and Sedimentation**

Significant erosion can occur from flooding in the on-site drainages from naturally occurring storm events. However, because the water line on Segment A2, which would be common to all alternative routes, would be placed aboveground on the existing bridge and beyond the banks of Teapot Creek, impacts from flooding would not occur. Additionally, standard stormwater control practices would be employed to minimize runoff from disturbed areas.

## **3.3 SOILS**

Construction of the proposed water line would require excavation and stockpiling of soil under any alternative. These soils could be susceptible to erosion until replaced. Soil erosion could also occur after the soil was replaced and before sufficient ground cover was developed. Erosion impacts associated with stockpiling and with recently replaced soils could occur. The potential for significant soil erosion could be reduced by backfilling the trench immediately after completing construction activities, then implementing a revegetation program.

## **3.4 BIOLOGICAL RESOURCES**

### **Vegetation**

Construction activities (excavation, removal, and stockpiling of topsoil; vehicle access) could disturb vegetated areas. Potential impacts could also occur as a result of soil compaction and removal or crushing of individual plants.

All alternatives would pass through areas of mixed grass prairie vegetation, which supports native wildlife and has periodically been grazed by domestic sheep. The following areas would be disturbed under the various alternatives:

- Alternative A would temporarily disturb 0.6 hectare (1.5 acres).
- Under Alternative B, in combination with Segments A2 and A3, approximately 1.7 hectares (4.3 acres) of mixed grass prairie vegetation along existing ROWs would be disturbed.
- Under Alternative B, in combination with Segment A2 and Alternative C, approximately 2.0 hectares (5.1 acres) of mixed grass prairie vegetation in existing road ROWs would be disturbed, and another 0.6 hectare (1.5 acres) of mixed grass prairie vegetation outside of existing road ROWs would be disturbed.

- Under Alternative C, in combination with Segments A1 and A2, approximately 0.6 hectare (1.5 acres) of mixed grass prairie vegetation within existing road ROWs would be disturbed, and another 0.6 hectare (1.5 acres) outside of existing highway ROWs in less-disturbed habitats would be disturbed; these habitats have also been grazed by sheep in the past.

Because the vegetation along the alternative corridors is not unique in the area and is generally poorly developed, these temporary impacts would be considered to be minor for widespread habitats. Moreover, specific revegetation efforts by the Wyoming Oil and Gas Conservation Commission (WYOGCC) should mitigate potential construction-related impacts on vegetation. These efforts could include salvaging and replacing topsoil; loosening compacted soils to enhance water absorption; restoring natural drainage patterns; stabilizing soils and minimizing erosion; and seeding, fertilizing, and mulching disturbed areas using a mixture, rate, and method conducive to rapid revegetation of the corridor. The WYOGCC conducts quarterly reviews of the NPR-3 site to ensure compliance with its regulations pertaining to vegetation.

## **Wildlife**

*Raptors.* Due to the absence of nest sites along the alternative corridors and the relatively short duration of disturbance activities, construction-related activities would not impact raptor populations. Impacts to foraging habitat would be minimal. Overall, the adverse effects to raptor populations under the Proposed Action would be temporary and negligible.

*Big Game.* Impacts to big-game species along the alternative corridors would be localized and minor, as these species can easily avoid temporary disturbances. Because construction activities would largely be confined to already disturbed areas with vehicle access, animals would not be uniquely affected by construction activities while on the site. Therefore, any impacts would be temporary and negligible.

*Other Avian Species of Concern.* Impacts to other avian species of concern would not be expected due to the poorly developed habitat along the corridors.

*Aquatic Species.* No perennial water bodies occur along the alternative corridors. Due to the lack of perennial water, well-established aquatic habitats are not found along the corridors. Along Segment A2, the water line would be suspended over Teapot Creek, thus avoiding any construction within the intermittent aquatic habitat and wetlands in the vicinity. Under Alternative C, the water line would cross an additional drainage with wetland vegetation as it passes to the west of the gas plant. This drainage is a tributary to Teapot Creek and would be spanned in a manner similar to the Teapot Creek crossing to avoid any potential impact to the wetlands.

## **3.5 SURFACE WATER**

Construction in the alternative corridors could result in two types of impacts to the intermittent Teapot Creek drainage: the erosion and transport of sediment and the disturbance of drainage banks and beds. Because the water line would be installed along or attached to the existing road-bridge under all alternatives, short-term increases in turbidity and suspended sediments would not be expected to occur. Moreover, the water quality at this segment of the creek is currently degraded and of low productivity (RETEC 2004; WDEQ 2007b), and the planned duration of construction is short. Therefore, no adverse effects on surface water quality would be anticipated. Alternative C would cross an additional drainage as it passes to the west of the gas plant. This drainage is a tributary to Teapot Creek and would be spanned in a manner similar to the Teapot Creek crossing for Segment A2 to avoid any effects on water quality.

The discharging of water line test water and disinfected waters would be the same under all alternatives. These discharges could require a National Pollutant Discharge Elimination System (NPDES) permit or be allowable under a State of Wyoming - General Permit for Temporary Discharges (WDEQ 2007a) as discharge into an existing water body. Conditions for the NPDES permit require that discharge not be allowed into live streams or adjacent to any water bodies and that erosion control devices and methods be implemented (WDEQ 2006). Implementation of these measures would reduce impacts from hydrostatic testing to insignificant levels. To avoid any potential for impacts to surface water bodies, DOE would discharge test waters into the site's existing septic system.

### **3.6 NOISE**

The noise generated under the Proposed Action would result from operation of heavy construction equipment. Average sound emissions from typical construction equipment at 15 meters (50 feet) include trucks at 88 dBA, backhoes at 85 dBA, and graders at 85 dBA. Where hard rock formations are encountered along the proposed corridors, controlled blasting may be required. This would elevate sound levels temporarily. Blasting would be conducted during daylight hours to reduce potential disturbances.

There are no state regulations governing noise emissions during construction or operation of the proposed project. The U.S. Environmental Protection Agency (EPA) has established maximum allowable noise exposure levels. The EPA maximum allowable 24-hour  $L_{eq}$  (equivalent sound levels) for continuous noise is 66.4 dBA. The EPA maximum allowable 8-hour  $L_{eq}$  for intermittent sounds (such as those caused by construction) is 78 dBA. Persons exposed daily to continuous sound levels of up to 66.4 dBA or intermittent sounds of up to 78 dBA would not experience hearing losses (EPA 1978). If necessary, workers would wear protective ear equipment sufficient to protect their hearing.

Construction-related noise impacts on workers represent a short-term nuisance. Because the duration of construction activities would be short-term and there are no sensitive noise receptors in the project area, noise impacts would be minor under the Proposed Action.

### **3.7 CULTURAL RESOURCES**

Based on filed surveys conducted in May 2008, there are no known cultural, archaeological, or historical resources that would be disturbed by construction along any of the alternative corridors (Shire 2008). However, based on many decades of site-disturbing activities and numerous recent cultural resource surveys, DOE recognizes that there is the potential for impacts to occur to subsurface cultural resources during clearing, leveling, and grading along the alternative corridors and before and during trenching activities. Cultural resources could be physically damaged or destroyed by heavy equipment during trenching activities and could be removed from meaningful context. DOE would monitor construction activities to ensure that personnel complied with existing policies and procedures relative to mitigation of impacts to cultural resources during construction of the water line. Adherence to the site's procedures would ensure that impacts on cultural resources would be avoided or mitigated. These requirements are outlined in the DOE NPR standard operating procedures, DOE 5407 - *Protection of Cultural Resources*, and DOE 5403.01 - *Environmental Policy*, and reflect requirements in DOE Order 5480.4 - *Environment, Safety and Health Protection Standards*.

### **3.8 ACCIDENTS**

Standard industrial accidents could occur during installation of the water line. There would likely be no accidents that would result in harm to the environment, workers, or the public from a water line failure.

Whether accidental or intentional, a failure of the water line would release potable water to the environment until the system was shut down. Such a release would have little potential to cause harm.

The site currently has emergency procedures to respond to any type of on-site accident, including emergency response plans and procedures for the current water treatment system. Additionally, because the potable water would arrive at the site already treated to drinking water standards, the remote possibility of a worker accident involving sodium hypochlorite (which is currently being used under the No Action Alternative to treat trucked-in water) would be eliminated.

### **3.9 NO ACTION ALTERNATIVE**

Under the No Action Alternative, there would be no new ground disturbance affecting land use, biological resources, or cultural resources. RMOTC would continue to operate using trucked-in waters that require supplemental on-site treatment with sodium hypochlorite and bottled drinking water.

### **3.10 COMPARISON OF ACTION ALTERNATIVES**

As described in Section 1.4 and shown on Figure 2, DOE could choose among several combinations of segments under Alternative A, B, or C to meet its purpose and need. Table 1 presents the suite of alternatives from which DOE may choose and summarizes the impacts under each alternative. Where there are differences among the alternatives, the table has been highlighted to note these differences.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19

This page intentionally left blank.

**Table 1. Comparison of Impacts Among Action Alternatives**

Environmental Resource	Alternative Corridors			
	Alternative A – Segments A1, A2, and A3	Segments A1 and A2 + Alternative C	Alternative B + Segments A2 and A3	Alternative B + Segment A2 + Alternative C
<b>Land Use</b>	Approximately 5.8 hectares (14.4 acres) of land along the ROW would be temporarily disturbed and unavailable for grazing.	Approximately 5.8 hectares (14.3 acres) of land along the ROW would be temporarily disturbed and unavailable for grazing. An additional 0.6 hectare (1.5 acres) of land (approximately) would be disturbed outside of any existing ROW.	Approximately 6.4 hectares (15.9 acres) of land along the ROW would be temporarily disturbed and unavailable for grazing.	Approximately 6.4 hectares (15.8 acres) of land along the ROW would be temporarily disturbed and unavailable for grazing. An additional 0.6 hectare (1.5 acres) (approximately) of land would be disturbed outside of any existing ROW.
<b>Geologic Hazards</b>	No unique hazards that cannot be address via routine design and construction techniques.	No unique hazards that cannot be address via routine design and construction techniques.	No unique hazards that cannot be address via routine design and construction techniques.	No unique hazards that cannot be address via routine design and construction techniques.
<b>Soils</b>	No conditions that would challenge constructability. Standard practices for erosion and stormwater controls would mitigate sedimentation impacts.	No conditions that would challenge constructability. Standard practices for erosion and stormwater controls would mitigate sedimentation impacts.	No conditions that would challenge constructability. Standard practices for erosion and stormwater controls would mitigate sedimentation impacts.	No conditions that would challenge constructability. Standard practices for erosion and stormwater controls would mitigate sedimentation impacts.
<b>Biological Resources</b>	Approximately 0.6 hectare (1.5 acres) of mixed grass prairie vegetation in existing road ROWs would be temporarily lost until revegetated.	Approximately 0.6 hectare (1.5 acres) of mixed grass prairie vegetation in existing road ROWs would be temporarily lost until revegetated. Another 0.6 hectare (1.5 acres) (approximately) of mixed grass prairie vegetation outside of existing road ROWs would also be temporarily lost until revegetated.	Approximately 1.7 hectares (4.3 acres) of mixed grass prairie vegetation in existing road ROWs would be temporarily lost until revegetated.	Approximately 2.0 hectares (5.1 acres) of mixed grass prairie vegetation in existing road ROWs would be temporarily lost until revegetated. Another 0.6 hectare (1.5 acres) (approximately) of mixed grass prairie vegetation outside of existing road ROWs would also be temporarily lost until revegetated.

**Table 1. Comparison of impacts among action alternatives (continued)**

Environmental Resource	Alternative Corridors			
	Alternative A – Segments A1, A2, and A3	Alternative A - Segments A1 and A2 + Alternative C	Alternative B + Segments A2 and A3	Alternative B + Segment A2 + Alternative C
<b>Surface Water</b>	Teapot Creek would be spanned and routine stormwater controls would be applied to avoid impacts to water quality.	Teapot Creek would be spanned and routine stormwater controls would be applied to avoid impacts to water quality.	Teapot Creek would be spanned and routine stormwater controls would be applied to avoid impacts to water quality.	Teapot Creek and its tributary east of the gas plant would be spanned and routine stormwater controls would be applied to avoid impacts to water quality.
<b>Noise</b>	No public receptors would be affected. Routine worker hearing protection would be employed as necessary to prevent impacts to workers.	No public receptors would be affected. Routine worker hearing protection would be employed as necessary to prevent impacts to workers.	No public receptors would be affected. Routine worker hearing protection would be employed as necessary to prevent impacts to workers.	No public receptors would be affected. Routine worker hearing protection would be employed as necessary to prevent impacts to workers.
<b>Cultural Resources</b>	No known cultural, archaeological, or historical resources would be impacted. Site procedures would be applied to prevent or mitigate impacts to resources that might be uncovered through subsurface excavation.	No known cultural, archaeological, or historical resources would be impacted. Site procedures would be applied to prevent or mitigate impacts to resources that might be uncovered through subsurface excavation.	No known cultural, archaeological, or historical resources would be impacted. Site procedures would be applied to prevent or mitigate impacts to resources that might be uncovered through subsurface excavation.	No known cultural, archaeological, or historical resources would be impacted. Site procedures would be applied to prevent or mitigate impacts to resources that might be uncovered through subsurface excavation.



## **4.0 CUMULATIVE IMPACTS**

Cumulative impacts result from the incremental impact of a proposed action when added to other past, present, and reasonably foreseeable future actions. Secondary impacts are those that are caused by a proposed action, but that may occur later in time or farther removed in distance, relative to the primary impacts of the proposed action (40 CFR Section 1508.7).

The construction of a water pipeline would cause surface disturbance and temporary impacts on land use and biota similar to that which occurs routinely at RMOTC as a result of ongoing oil and gas exploration and maintenance and replacement of aging infrastructure such as roads, oil and gas transmission lines, and other water and communication lines. Depending upon funding levels, this type of temporary disturbance may range from tens of acres to hundreds of acres annually. All disturbed lands are reclaimed under DOE policies and procedures as soon as possible after disturbance or after a specific surface use is discontinued.

### **4.1 COMMITTEMENT OF RESOURCES AND SHORT-TERM USES**

#### **4.1.1 Irreversible/Irretrievable Commitment of Resources**

An irreversible commitment of resources is defined as the loss of future options. The term applies primarily to the effects of use of nonrenewable resources such as minerals or cultural resources, or to those factors such as soil productivity that are renewable only over long periods. It could also apply to the loss of an experience as an indirect effect of a “permanent” change in the nature or character of the land. An irretrievable commitment of resources is defined as the loss of production, harvest, or use of natural resources. The amount of production forgone is irretrievable, but the action is not irreversible. If the use changes, it is possible to resume production.

No alternative would have irreversible impacts because revegetation efforts would eventually restore the forage value of the areas impacted by pipeline construction for native wildlife and grazing of domestic animals.

The primary irretrievable impacts of the Proposed Action would involve the use of energy, labor, materials, and funds. The direct losses of biological productivity and the use of natural resources from these impacts would be inconsequential and only temporary.

#### **4.1.2 The Relationship between Local Short-Term Uses of the Human Environment and the Maintenance and Enhancement of Long-Term Productivity**

This section addresses the commitment of resources associated with the alternatives relative to the loss of long-term productivity associated with these commitments.

All alternatives would commit resources in the form of energy, labor, materials, and funds. The justification for these commitments at this time is described in Section 1.3, Purpose and Need. Long-term productivity associated with the site relates to biological value as habitat. The alternatives would be implemented within RMOTC where substantial portions of the land have been specifically dedicated for nearly a century for oil and gas exploration and extraction. However, the incremental but temporary loss of biological value resulting from the installation of a water pipeline is balanced by the protections afforded to the long-term productivity of large areas of the site where little or no disturbance has occurred and where DOE is committed to maintaining the site in its natural undisturbed condition.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19

This page intentionally left blank.

## 5.0 REFERENCES



- BKS (BKS Associates, Inc.). 2005. *Wetland Delineation Report*. Prepared by BKS Associates, Inc., for the U.S. Department of Energy, Casper, Wyoming. January 23.
- BLM (Bureau of Land Management). 2007. *Proposed Resource Management Plan and Final Environmental Impact Statement for the Casper Field Office*. June.
- DOE (U.S. Department of Energy). 1998. *Final Site-Wide EA for Preparation for Transfer of Ownership of Naval Petroleum Reserve No.3, Natrona County, Wyoming*. DOE/EA-1236. Prepared by the U.S. Department of Energy, Casper, Wyoming. April.
- DOE/RMOTC (U.S. Department of Energy/Rocky Mountain Oilfield Testing Center). 2007. Standard Operations Procedure (SOP) E5403.21. DOE Reclaiming Location Protocol. Issued June 27, 2005; revised June 27, 2007.
- DOE/RMOTC (U.S. Department of Energy/Rocky Mountain Oilfield Testing Center). 2006. Standard Operations Procedure (SOP) E5403.12. Potable Water Monitoring. Issued October 5, 2004; revised October 5, 2006.
- Doyle, Dave. 2007. Personal communication, telephone conversation between Dave Doyle, Project Manager, DOE/RMOTC, and Steve Shire, Project Manager, DOE/RMOTC. Subject: project description. January.
- EPA (U.S. Environmental Protection Agency). 1978. *Protective Noise Levels*. 550/9-79-100. Condensed Version. Office of Noise Abatement and Control.
- FEMA (Federal Emergency Management Agency). 1986. Flood insurance maps for the U.S. Midwest and for Edgerton, Wyoming. National Flood Insurance Program.
- Miller, Genee. 2007. Personal communication, telephone conversation between Genee Miller, Natrona County planning technician, and Dan Lowery, Senior Environmental Planner, Battelle Memorial Institute. December 18, 2007.
- Pronghorn Archaeological Services. 1995. *Class III Cultural Resources Inventory of the Naval Petroleum Reserve No. 3 (Teapot Dome Oilfield)*. Prepared for Fluor Daniel by Pronghorn Archaeological Services. June.
- RETEC (The RETEC Group). 2004. *Use Attainability Analysis: Salt Creek and Powder River, Natrona and Johnson County, Wyoming*. Prepared by The RETEC Group, Fort Collins, Colorado, for Anadarko Petroleum Corp., Midwest, Wyoming. RETEC Project No. APC02-18086-240. November.
- Shire, Steve. 2008. Personal communication, e-mail, from Steve Shire, DOE/RMOTC Project Manager, to Thomas Anderson, Project/Program Manager, Battelle Memorial Institute, dated May 28. Subject: Waterline EA.
- USFWS (U.S. Fish and Wildlife Service). 2007. Undated letter to Clarke Turner, Director, RMOTC, received July 13, 2007, and undated letter to Michael Taylor, Director, Technical Assurance, RMOTC, received September 12, 2007.

- 1 WDEQ (Wyoming Department of Environmental Quality). 2006. Letter of violations. Control # October  
2 30, 2006, for NPDES permit WY0028274, US DOE B-TP Tank Battery. November 2006.
- 3 WDEQ (Wyoming Department of Environmental Quality). 2007a. *General Permit for Temporary*  
4 *Discharges*. September.
- 5 WDEQ (Wyoming Department of Environmental Quality). 2007b. Personal communication, telephone  
6 conversation with Leah Kraff, staff member, Wyoming Department of Environmental Quality, Steve  
7 Shire, Project Manager, DOE/RMOTC, and Dan Lowery, Senior Environmental Planner, Battelle  
8 Memorial Institute. January 16.
- 9 WGF (Wyoming Game and Fish Department). 2001. *Strategic Habitat Plan and Terrestrial Priority*  
10 *Habitat Map*. Available at <http://gf.state.wy.us/habitat/strategicplan/index.asp>. December 6, 2001.

## **APPENDIX A      Scoping Letter and Distribution Lists**

- 1
- 2      DOE mailed the scoping letter shown on the next page to the businesses, agencies, and organizations
- 3      shown in the following mailing list.

1 **SCOPING LETTER**

			
November 01, 2007			
SerialNo:CDT\MJT00.1841			
Name Company Address City, State Zip			
Subject: Notice of Scoping – Rocky Mountain Oilfield Testing Center / Naval Petroleum Reserve Number Three - Potable Waterline Environmental Assessment DOE / EA- 1604			
<p>The U.S. Department of Energy (DOE) is beginning the preparation of an Environmental Assessment (EA) for the proposed action of connecting the Rocky Mountain Oilfield Testing Center (RMOTC) and Naval Petroleum Reserve No. 3 (NPR-3) to the Salt Creek Joint Powers Board (SCJPB) potable water pipeline which supplies water from Casper to the towns of Midwest and Edgerton, Wyoming. The SCJPB pipeline passes the western border of DOE's property boundary as it runs along the east side of State Highway 259. Two alternative routes will be assessed in the EA. The first would access the pipeline near the existing site access road, crossing approximately 200 feet of private lands through which DOE has easement agreements which may require modifications. This alternative would bury the pipeline within the road right-of-way (ROW), and parallel the site's roads for approximately 6 miles, terminating at the site buildings which routinely house site staff. The second alternative route would access the existing waterline within a mile or two north of the existing site access road and cross less than a mile of lands managed by the Bureau of Land Management (BLM) before entering DOE's site and following in the ROW of the site roads to the site's staffed buildings. For this alternative a new roadway would be constructed from Highway 259 through BLM lands, and provide a new site entrance to RMOTC/NPR-3. The current site access road would be closed under this alternative.</p> <p>DOE manages NPR-3, also known as Teapot Dome Oil Field, as the only operating oil field in the continental United States owned by the U.S. government. This field is located in Natrona County, Wyoming, approximately 35 miles (56 km) north of the City of Casper, and covers an area of 9,481 acres (3,837 hectares).</p> <p>DOE is developing a Site Wide Environmental Assessment (SWEA) to assess the impacts of site operations for the next five years, in accordance with the Council for Environmental Quality's (CEQ) National Environmental Policy Act (NEPA) regulations (40 CFR 1506.1). The assessment of this action in a separate EA is procedurally acceptable because: the action 1) is needed to immediately improve the health and safety of the working environment; 2) is independent of the decisions to be made based on the SWEA; and 3) would not prejudice the site wide decisions that will result from the SWEA.</p> <p>Pursuant to the requirements of the NEPA, CEQ regulations for implementing the procedural provisions of NEPA (40 CFR Parts 1500-1508) and DOE's implementing procedures for compliance with NEPA (10 CFR Part 1021), DOE is preparing a draft EA to:</p>			
<p>U.S. Department of Energy • Naval Petroleum and Oil Shale Reserves in Colorado, Utah and Wyoming 907 N. Poplar Street, Suite 150 • Casper, WY 82601 • 307.233.4800 • 888.599.2200 • <a href="http://www.rmotc.com">www.rmotc.com</a></p>			

- Identify any adverse environmental effects that cannot be avoided should the proposed actions be implemented.
- Evaluate viable alternatives to the proposed actions, including a no action alternative.
- Describe the relationship between local short-term uses of the environment and the maintenance and enhancement of long-term productivity.
- Characterize any irreversible and irretrievable commitments of resources that would be involved should these proposed actions be implemented.

The range of reasonable alternatives that DOE intends to assess in the EA includes:

1. Action Alternatives: Two alternative routes for accessing the site from the current offsite location of the waterline will be assessed
2. No action Alternative: Potable water would continue to be trucked into facilities that house onsite staff

The EA will describe the environmental impacts that could be caused by the implementation of any of the alternatives and, if necessary, will identify possible mitigation measures to reduce or eliminate those impacts. The EA will describe the potentially effected environment and the impacts that may result to:

- Geology/Soils
- Biological Resources
- Water Resources
- Historic, Archaeological, and Cultural Resources
- Land Use
- Wildlife and Habitat
- Air Quality
- Human Health
- Socioeconomics
- Community

As part of DOE's NEPA scoping process, we would welcome learning of any issues or comments that you might have in regard to our Proposed Action that should be addressed in the SWEA. Please provide any comments or questions via phone, email, fax, or US mail by November 16<sup>th</sup> 2007 to:

DOE NEPA Compliance Officer  
DOE RMOTC/NPR-3  
U.S. Department of Energy  
907 N. Poplar Street, Suite 150  
Casper, WY 82601  
Fax: (307) 233-4851  
Toll Free Voice: 1-888-599-2200, Email: [RMOTCSWEA@rmotc.doe.gov](mailto:RMOTCSWEA@rmotc.doe.gov)

As preparation of the EA proceeds, periodic updates and other relevant information will be provided on the project web page <http://www.rmotc.com>.

CLARKE D. TURNER  
Director, NPR-3/RMOTC

jes/5430/msw

1	MAILING LIST – ORGANIZATIONS		
2	American Wildlands	49	Natrona County Historic Preservation
3	Anadarko Petroleum Corp.	50	Commission
4	Aquarius II	51	Natrona County Public Library
5	Arnell Oil Company	52	NEPA State Planning Department, Office of the
6	Audubon Society	53	Governor
7	Audubon Wyoming	54	North American Pronghorn Foundation
8	Bill Owens	55	North Platte Valley Conservation District
9	Biodiversity Conservation Alliance	56	North Star Operating Co
10	Bradley Jc	57	Pathfinder Back Country Horsemen
11	Buck Allemand	58	Patty Myers
12	Carol Bowers, Secretary	59	Perri Allemand
13	Carpenter Brice G Realty	60	Petroleum Association of Wyoming
14	Casper Dirt Riders	61	Platte River Parkway Trust
15	Chuck Lanham	62	Platte River Rod and Gun Club
16	Citation Oil & Gas Corporation	63	Powder River Basin Resource Council
17	Coalbed Methane Coordination Coalition	64	Public Lands Advocacy
18	Conservancy of the Phoenix	65	Rawhide Western Inc
19	Dick Wilder	66	Raymond Allemand
20	Elk Petroleum Inc	67	Rick Ewig, Vice President
21	Ellbogen Oil Producers	68	Rocky Mountain Elk Foundation
22	Elva Allemand	69	Sierra Club
23	Farleigh Oil Properties	70	South Goshen Conservation District
24	Foundation for North American Wild	71	State Historical Preservation Office
25	Four G Oil CO	72	Stovall Oil Co
26	Gas Ventures	73	Sweetwater County Historical Museum
27	Gastech Inc	74	Teselle Inc.
28	Governor’s Planning Office	75	The Conservation Fund
29	Independent Petroleum Association of	76	The Honorable Dave Freudenthal, Governor of
30	Mountain States	77	Wyoming
31	Izaak Walton League	78	The Land Trust Alliance
32	James Allemand	79	The Nature Conservancy
33	Kemmerer Historic Preservation Commission	80	The Wilderness Society
34	Kirkwood Oil & Gas	81	The Wildlife Society, Wyoming Chapter
35	Lucille Dumbrill, Treasurer	82	Thorofare Resources
36	Lyn George Geologist	83	Tom Allemand
37	Mabel Brown	84	Town of Glenrock
38	Mary Garman	85	Town of Mills
39	Mary Owens	86	Trout Unlimited
40	Mike Jording, President	87	Twiford Exploration Inc
41	Mormon Trails Association	88	U.S. Environmental Protection Agency
42	Mountaintop Consulting LLC	89	U.S. Fish & Wildlife Service
43	Murie Audubon Society	90	Underwood Oil & Gas
44	Nance Petroleum Corporation	91	US Department of Energy, Office of
45	National Association of Attorney Generals	92	Environment, Security, Safety and Health
46	National Governor’s Association	93	US Fish and Wildlife Services
47	National Wildlife Federation	94	USDI National Park Service
48	Natrona County Conservation District	95	Warren E & P Inc
		96	Western Land Exchange Project



- |    |  |    |  |
|----|--|----|--|
| 1  | Western Resource Advocates               | 16 | Wyoming Office of State Lands and          |
| 2  | Wildlife Habitat Council                 | 17 | Investments                                |
| 3  | Wold Oil Properties                      | 18 | Wyoming Oil and Gas Conservation           |
| 4  | Wyoming Association of Municipalities    | 19 | Commission                                 |
| 5  | Wyoming Back Country Horsemen of America | 20 | Wyoming Outdoor Council                    |
| 6  | Wyoming County Commissioners             | 21 | Wyoming Sportsman's Association            |
| 7  | Wyoming Department of Agriculture        | 22 | Wyoming State Historic Preservation Office |
| 8  | Wyoming Department of Environmental      | 23 | Wyoming State Historical Society           |
| 9  | Quality                                  | 24 | Wyoming State Planning Office              |
| 10 | Wyoming Department of State Parks and    | 25 | Wyoming Stockgrowers Association           |
| 11 | Cultural Resources                       | 26 | Wyoming Wilderness Association             |
| 12 | Wyoming Fly Casters Association,         | 27 | Wyoming Woolgrowers Association            |
| 13 | Wyoming Game and Fish Department         | 28 | Zephyr Exploration                         |
| 14 | Wyoming Mining Association               | 29 | Wyoming Motorcycle Trails Association      |
| 15 | Wyoming Natural Diversity Database       | 30 | Bureau of Indian Affairs                   |

**31 MAILING LIST – INDIVIDUALS**

- |    |  |    |  |
|----|--|----|--|
| 32 | Darby Collins, DOE                         | 46 | Sebastian "Bronco" LeBeau Tribal Historic    |
| 33 | Dr. Kate Winthrop                          | 47 | Preservation Officer                         |
| 34 | Jerry Cordova,                             | 48 | Cultural Resource Coordinator                |
| 35 | Marsha Butterfield, USFS                   | 49 | Mr. Conrad Fisher - Tribal Historic          |
| 36 | Outdoor Women of Wyoming                   | 50 | Preservation Officer                         |
| 37 | V Allemand                                 | 51 | JoAnn White - Tribal Historic Preservation   |
| 38 | Mr. Jay St. Goddard Chairman               | 52 | Officer                                      |
| 39 | Mr. Fredrick Auck Chairman Tribal Business | 53 | Ms. Reba Tehran                              |
| 40 | Council                                    | 54 | Mr. Terry Gray Cultural Resource Coordinator |
| 41 | Mr. Ivan Posey Chairman                    | 55 | Mr. Darrin Old Coyote Cultural Director      |
| 42 | Mr. Gregg Bourland Chairman                | 56 | Mr. Steven Brady                             |
| 43 | Mr. John Yellow Bird Steele President      | 57 | Mr. William Kindle President                 |
| 44 | Mr. Eugene Littlecoyote President          | 58 | Mr. Richard Brannon Chairman                 |
| 45 | Ms. Marilyn Parsons                        | 59 | Arlen Shoyo                                  |
|    |  | 60 | Mr. Carl Venne Chairman                      |

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19

This page intentionally left blank.

1

## APPENDIX B Responses Received to Scoping Letter



Dave Freudenthal, Governor

### Department of Environmental Quality

To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.



John Corra, Director

November 16, 2007

DOE NEPA Compliance Officer  
DOE RMOTC/NPR-3  
U.S. Department of Energy  
907 N. Poplar Street, Suite 150  
Casper, WY 82601



Re: Response to the Environmental Assessment for the Rocky Mountain Oilfield Testing Center / Naval Petroleum Reserve Number Three – Potable Waterline

To whom it may concern:

These comments regarding the Rocky Mountain Oilfield Testing Center / Naval Petroleum Reserve Number Three – Potable Waterline Environmental Assessment DOE / EA- 1604 are specific to this agency's statutory mission within State government which is protection of public health and the environment. In that regard these comments are meant to, in association with all other agency comments, assist in defining the Official State Position.

There are two Water Quality Division (WQD) permits that may apply to the project. Any or all of them may apply depending on the eventual scope of the project.

- ☐ Discharge Permit. Any discharges to "waters of the state" must be permitted under the Wyoming Pollutant Discharge Elimination System (WYPDES) program. This program is part of the federal Clean Water Act, but is administered by the WQD. Coverage is required for discharges from cofferdam dewatering, discharges from hydrostatic pipeline testing, or discharge of other waste waters to waters of the state. For clarification waters of the state include rivers, streams, dry draws, wetlands, lakes, reservoirs and even stock ponds. This permit will require some sampling and will incorporate effluent limits for any constituents of concern. Roland Peterson (307-777-7090) can provide additional information.
- ☐ Storm Water Associated with Construction Activities. This permit is required any time a project results in clearing, grading, or otherwise disturbing one or more acres. The disturbed area does not need to be contiguous. The permit is required for surface disturbances associated with construction of the project, access roads, construction of wetland mitigation sites, borrow and stockpiling areas, equipment staging and maintenance areas and any other disturbed areas associated with construction. A general permit has been established for this purpose and either the

Herschler Building • 122 West 25th Street • Cheyenne, WY 82002 • <http://deq.state.wy.us>

ADMIN/OUTREACH (307) 777-7937 FAX 777-3610	ABANDONED MINES (307) 777-6145 FAX 777-6462	AIR QUALITY (307) 777-7391 FAX 777-5616	INDUSTRIAL SITING (307) 777-7369 FAX 777-5973	LAND QUALITY (307) 777-7756 FAX 777-5864	SOLID & HAZ. WASTE (307) 777-7752 FAX 777-6073	WATER QUALITY (307) 777-7781 FAX 777-6070
--	---	---	---	--	--	---



2

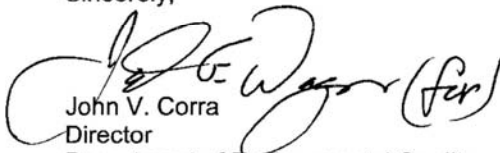
project sponsor or general contractor is responsible for filing a Notice of Intent (NOI) and complying with the provisions of the general permit. The NOI should be filed no later than 30 days prior to the start of construction activity. Please contact Barb Sahl at 307-777-7570.

- ☐ Temporary Turbidity Variance. While not mandatory, a temporary turbidity variance would ensure compliance with the turbidity standard during work within all drinking water supplies and fisheries that may be crossed during the project. In accordance with Section 23(c)(2) of the Chapter 1 Surface Water Standards, the administrator of the Water Quality Division may authorize temporary increases in turbidity above the numeric criteria in Section 23 (a) of the Standards in response to an individual application for a specific activity. An application must be submitted and a variance approved by the administrator before any temporary increase in turbidity above the numeric limits takes place. Please contact David Waterstreet at 307-777-6709.
- ☐ Section 404. While not a state permit, this project will require a section 404 permit from the US Army Corps of Engineers. Any time work occurs within waters of the US a 404 permit may be required. Please contact the Corps (307-772-2300) for specific information regarding jurisdiction and requirements.

These are the permits most likely to affect the project. The Department of Environmental Quality would like to see the NEPA analysis and resulting project address any potential effects to surface water quality that may occur as a result of existing or proposed construction practices in riparian areas. Also, every effort to prevent erosion of any kind should be taken. Any sediment created by the project can enter and affect the water quality of the receiving water.

We appreciate the opportunity to comment in this process and look forward to working with you in the future. If you have any questions, please feel free to contact David Waterstreet at 307-777-6709.

Sincerely,

  
John V. Corra  
Director  
Department of Environmental Quality

JVC/DHW/cs/7-1005

cc: Governor's Planning Office, Herschler Bldg, 1<sup>st</sup> Floor, East Wing  
Todd Parfitt, Deputy Director, DEQ Cheyenne

F:\Division\WQD\Jeremy\mystuff\NEPA\Spc07\Rocky\_Mtn\_Oilfield\_Potable\_Waterline\_EA

## **APPENDIX C    Comments and Responses**

### **Commentors**

United States Fish and Wildlife Service (USFWS)

Wyoming Department of Agriculture

Wyoming State Engineers Office

Wyoming Game and Fish Department

**UNITED STATES FISH AND WILDLIFE SERVICE (USFWS) COMMENTS**

**Comment Federal Agency Responsibilities**

In response to request to review the proposed action, we are providing you with comments on threatened, endangered species, species of concern and migratory birds. The Service provides recommendation for protective measures for threatened and endangered species in accordance with the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531). Protective measures for migratory birds are provided in accordance with the Migratory Bird Treaty Act (MBTA), 16 U.S.C. 703, and the Bald and Golden Eagle Protection Act (BGEPA), 16 U.S.C. 688. Other fish and wildlife resources are considered under the Fish and Wildlife Coordination Act and the Fish and Wildlife Act of 1956, as amended, 70 Stat. 119, 16 U.S.C. 742-742j.

**DOE Response:** DOE has reviewed your concerns regarding endangered species in accordance with the Endangered Species Act of 1973 and the protective measures for threatened Migratory Birds Treaty Act, and the Bald and Golden Eagle Protection Act. We reviewed the Fish and Wildlife Coordination Act and the Fish and Wildlife Act of 1956. DOE is concerned with the preservation of all types of threatened or endangered species that may have habitat within the NPR-3. DOE will continue to monitor the range for protected and sensitive species of plant and animal life.

**General Comments**

All three of the proposed alternatives will pass through a black tailed prairie dog (*Cynomys ludovicianus*) colony located in the southwestern quarter of sections 33, T39N, R78W and the northwest of section 4 T38N, R78W. We believe that Alternative A (use of the existing road right-of-way (ROW) to connect to the Salt Creek Joint Powers Board potable water system) will have the least effect to the black-tailed prairie dog, a species crucial to the future recovery of the black footed ferret.

In Wyoming, we do not recommend surveys for black-footed ferrets in black-tailed prairie dog towns as the available information suggests that previously unknown black-footed ferret populations are unlikely to occur in these areas (see our February 2, 2004 letter previously provided for additional details). This clearance from the survey recommendations reflects only the negligible likelihood of a wild population of ferrets occurring in an area. It does not provide insight into an area's value for survival and recovery of black-footed ferrets through future reintroduction efforts. Consultation with the Service is appropriate for any agency action resulting in an effect significant enough to diminish a site's value as a future reintroduction site. We also encourage project proponents to protect all prairie dog towns or complexes for their value to the prairie ecosystem and the many species that rely on them.

**DOE Response:** The DOE is concerned with the preservation of all types of threatened or endangered species that may have habitat within the NPR-3. DOE will continue to monitor the prairie dog towns during construction; however, in March 2008 RMOTC had a Range Management Survey initiated to address the range conditions for the NPR-3 and surrounding private operations. During this survey, the Range Manager noted that the prairie dogs had appeared to have been subject to a plague and were eradicated from the towns. In concurrence with USFWS DOE agrees that, Option A of the proposed waterline alternatives would cause the least disturbance to the prairie dog habitat that remains even though devoid of prairie dogs, since this option would predominantly use the existing roadway. It should be noted, however, that no routing alternative would disturb actively inhabited prairie dog colonies.

**Specific Comments**

**Threatened and Endangered Species:** In accordance with section 7(c) of the Act, we are providing you with information on threatened or endangered species or species proposed for listing under the Act that may be present in the project area.

Species	Status	Habitat
Black-footed ferret ( <i>Mustela nigripes</i> )	Endangered	Prairie dog towns
Blowout Penstemon ( <i>Penstemon Haydenii</i> )	Endangered	Sand dunes or blowouts

Black-footed ferrets; on page 15 of the draft EA it states that "black-footed ferrets are dependent upon the presence of extensive populations of white-tailed prairie dogs. The extent and densities of prairie dog towns along the proposed alternative corridors are insufficient to require further studies (USFWS 2007; DOE 1998)." Historically, black-footed ferrets were found in both white-tailed and black-tailed prairie dog towns. The species of prairie dog found within the RMOTC is the black-tailed prairie dog.

Wyoming Game and Fish Department data indicate that the black-tailed prairie dog town located within the project area is part of a much larger complex. Therefore, your analysis of effects to the black-footed ferret and the habitat essential for survival and recovery should be based on the total complex and the direct, indirect and cumulative effects to that complex. According to the Service's Black-Footed Ferret Survey Guidelines (USFWS 1989). A prairie dog complex consists of two or more neighboring prairie dog towns less than 7 km (4.3 miles) from each other.

**DOE Response:** In 2007 the DOE conducted a review of the prairie dog communities and found them to be healthy. In 2008 the DOE contracted a Range Manager to survey the site and provide recommendations for habitat management at RMOTC / NPR-3. He found that the previously healthy communities had been virtually eradicated, apparently as a result of a plague that infected not only the community located on the NPR-3 reserve but also on surrounding private properties adjacent to the field. On completion of the survey the Range Manager concluded that anticipated construction or operations activities near or adjacent to the prairie dog town would have no significant impact to the prairie dog communities. Therefore, activities planned in the near term are unlikely to have any impact upon these already decimated colonies. Black-tailed prairie dog colonies currently are managed as a Special Status Species. This includes avoidance of construction activities in prairie dog colonies whenever possible or minimization of such activities where necessary.

DOE will continue to monitor the prairie dog towns during our general construction and development of the oil field activities. Project construction will be evaluated under NEPA and the USFWS Black Footed Ferret Survey Guidelines to avoid populated prairie dog communities to the extent practicable.

**Blowout Penstemon:** Based on new information the Service has reevaluated the potential for occurrence of the Blowout Penstemon (*Penstemon haydenii*) in your management area and included it on the above species list. Blowout Penstemon is a perennial herb with stems less than 12 inches tall. The inflorescence is 2-6 inches long and has 6-10 compact whorls of milky-blue to pale lavender flowers. Blowout Penstemon was listed as endangered on October 1 1987.

Blowout Penstemon is known from multiple populations in western Nebraska (Ferrig 2001). The Plant's current known range in Wyoming consists of the Ferris dunes area in northwest Carbon County where the

1 plant is restricted to two habitat types: steep, northwest facing slopes of active sand dunes with less than 5  
2 percent vegetative cover; and on north facing sandy slopes, on the lee side of active blowouts with 25-40  
3 percent vegetative cover. Recent surveys have indicated that systematic surveys may be warranted in  
4 some lower elevations (below 6700 feet) in Wyoming where sand blowout features are located (BLM  
5 2005, Fertig 2001).

6 Blowouts are formed as strong winds deposit sands from the windward side of a dune to the Leeward side  
7 and result in a sparsely vegetated crater-like depression. Associated vegetation Includes blowout grass,  
8 thick spike wheatgrass, lemon scurf pea, Indian rice grass and western Wheatgrass. Threats to the plant  
9 occur when sand dunes are removed or overly disturbed by vehicular traffic. Known populations in  
10 Wyoming are found between 6680-7440 feet (Fertig 2001). However, recent surveys by Blomquist and  
11 Heidel (June 2002) indicate that surveys may be in some lower elevations where active sand blowout  
12 features occur. Surveys should be conducted from mid-June to early-July when flowering occurs by  
13 knowledgeable botanists trained in conducting rare plant surveys. The Service does not maintain a list of  
14 "Qualified" surveyors but can refer those wishing to become familiar with the Blowout Penstemon to  
15 experts who can provide training/services

16 **DOE Response:** The range management survey issued in 2008 to review the habitat and grazing  
17 activities on the NPR- 3 specifically reviewed the soil and biota of the range. During the survey the Range  
18 Manager found no evidence or occurrence of the Blowout Penstemon (*Penstemon haydenii*) or its habitat.

## 19 **Species of Concern**

20 **Greater Sage-Grouse:** The Service is currently conducting a review to determine if the greater Sage-  
21 grouse (*Centrocercus urophasianus*) listing. Greater sage-grouse are dependent on sage grouse habitats  
22 year-round. Habitat loss and degradation, as well as loss of population connectivity have been identified  
23 as important factors contributing to the decline of greater sage grouse populations range wide (Braun  
24 1998, Wisdom et al. 2002). Therefore, any activities that results in loss or degradation of sagebrush  
25 habitats that are important to this species should be closely evaluated for their impacts to sage-grouse. If  
26 important breeding habitat (leks, nesting, or brood rearing habitat) is present in the project area, the  
27 Service recommends no project-related disturbance March 1 through June 30, annually. Minimization of  
28 disturbance during lek activity, nesting, and brood rearing is critical to sage-grouse persistence within  
29 these areas. Likewise, if important winter habitats are present (Doherty et al. 2008), we recommend no  
30 project-related disturbance November 15 through March 14, annually.

31 We recommend you contact the Wyoming Game and Fish Department to identify important Greater sage-  
32 grouse habitats within the project area, and appropriate mitigate measures to minimize potential impacts  
33 from the proposed project. The Service recommends surveys and mapping of important greater sage-  
34 grouse habitats where local information is not available. The results of these surveys should be used in  
35 project planning, to minimize potential impacts to this species. No project activities that may exacerbate  
36 habitat loss or degradation should be permitted in important habitats. Additionally, unless site-specific  
37 information is available, Greater sage-grouse habitat should be managed following the guidelines by  
38 Connelly et al. 2000 (also known as the WAFWA guidelines). In Wyoming, information suggests that  
39 greater sage-grouse populations are negatively affected by energy development activities, especially those  
40 that degrade important sagebrush habitat, even when mitigate measures are implemented (Braun 1998,  
41 Lyon 2000, Naugle et al. 2006). Greater sage-grouse populations can repopulate areas developed for  
42 resource extraction after habitat reclamation for the species (Braun 1987). However, there is no evidence  
43 that population attains their previous levels and reestablishment of sage-grouse in an area may take 20 to  
44 30 years, or longer (Braun 1998). Therefore, this project should be carefully evaluated for long term and  
45 cumulative effects on the greater sage-grouse, since reclamation may not restore populations to pre-



activity levels. The DOE should ensure this activity does not exacerbate Greater sage-grouse declines on either a local or range-wide level.

**DOE Response:** No observations of sage grouse have been recorded during either routine operations or during the various environmental surveys that are routinely conducted. In this year's range management survey of the site, a range manager fully familiar with grouse habitat observed that poor soils, extensive weed invasions, and human disturbance of the area probably result in no sage-grouse habitat favorable for improvement efforts. The Range Manager during his review was instructed to pay particular concern for the sighting of the Greater Sage Grouse. Additionally a previous archeology review of cultural impact and plant and animal life on the reserve reported no indication of Sage Grouse or leks discoveries at NPR-3 (Dust Devil Archeology Review, DDA-07-02).

**Mountain Plover:** The Service has withdrawn the proposal to list the mountain plover and we will no longer be reviewing project impacts to this species under the Act. We do however encourage the DOE and their applicants to continue providing protection for this species as it remains protected under the Migratory Bird Treaty Act (16 U.S.C. 703). Measures to protect the Mountain plover from further decline may include (1) avoidance of suitable habitat during the Plover nesting season (April 10 through July 10), (2) prohibition of ground disturbing activities in prairie dog towns, and (3) prohibition of any permanent above ground structures that may provide perches for avian predators or deter plovers from using preferred habitat. Suitable habitat for nesting mountain plovers includes grasslands, mixed grassland areas and short-grass prairie, shrub-steppe, plains, alkali flats, cultivated lands, sod farms, and prairie dog towns.

**DOE Response:** No observations of Mountain Plovers have been recorded during routine operations or environmental field surveys. In this year's range management survey of the site, a range manager fully familiar with Mountain Plover habitat observed that poor soils, extensive weed invasions, and human disturbance of the area probably result in no mountain plover habitat favorable for improvement efforts. The DOE will follow the guidelines set forth by USFWD to assist in the protection of the Mountain Plover from further decline by include (1) upon discovery, the avoidance of habitats during the plover nesting season (April 10 through July 10), (2) prohibition of ground disturbing activities within a ¼ mile in active, inhabited prairie dog towns, and (3) upon discovery, prohibition of any permanent above ground structures that may provide perches for avian predators or deter plovers from using preferred habitats

**Migratory Birds:** Please recognize that consultation on listed species may not remove your obligation to protect the many species of migratory birds, including eagles and other raptors' protected under the MBTA and BGEPA. Of particular focus are the species in the Service's *Birds of Concern 2002*. In accordance with the FWCA (16 USC 2912 (a)(3)), this report identifies "species, subspecies, and populations of all migratory nongame Birds that, without additional conservation actions, are likely to become candidates for listing" under the Act. This report is intended to stimulate coordinated and proactive conservation actions among Federal, State, and private partners and is available at; <http://www.fws.gov/migratorybirds/reponslbcc2002.ndf>.

The MBTA, enacted in 1918, prohibits the taking of any migratory birds, their parts, nests, or eggs as permitted by regulations and does not require intent to be proven. Section 703 of the MBTA states, "Unless and except permitted by regulations ... it shall be unlawful at any time, by any means or in any manner, to ... take, capture, kill, attempt to take, capture, or kill. Or possess, any migratory bird, any part, nest, or eggs of any such bird..." The BGEPA, prohibits knowingly taking, or taking with wanton disregard for the consequences of an activity, any bald or golden eagles or their body parts, nests, or eggs, which includes collection, molestation, disturbance, or killing.

1 In order to promote the conservation of migratory bird populations and their habitats, the Service  
2 recommends that the DOE implement those strategies outlined within the Memorandum of Understanding  
3 directed by the President of the U.S. under the Executive Order 13186, where possible. Work that could  
4 lead to the taking of a migratory bird or eagle, their young, eggs, or nests (for example, if you are going to  
5 construct pipelines in the vicinity of a nest), should be coordinated with our office before any actions are  
6 taken.

7 On page 14, Section 2.4.2-Wildlife Resources, the EA states that "there are no known nest sites within the  
8 proposed areas of disturbance." Human presence associated with the proposed action within 0.5 mile of  
9 an active raptor nest may create a disturbance to nesting raptors. We recommend that construction of the  
10 water pipeline occur outside the active raptor nesting season (Jan.1st through Aug 15). If work must take  
11 place during the active nesting season we recommend a 0.5 mile buffer for all raptor nests to avoid the  
12 potential for nest abandonment and a possible violation of the MBTA and/or BGEPA.

13 **DOE Response:** DOE acknowledges its responsibilities under the MBTA and implements measures to  
14 minimize impacts on migratory birds. DOE will follow the guidance provided by its Range Manager, the  
15 Wyoming Game and Fish, and the USFWS in the protection of migratory birds. Raptor nests on NPR-3  
16 have been identified and mapped on internal site documents to prevent disturbance. In developing the  
17 water line proposal the migratory bird locations were taken into consideration. The identified nesting is  
18 approximately 3 sections away from the nearest proposed construction or operational activity. DOE has  
19 taken the measures to protect the migratory birds by restricting any operational activities and ground  
20 disturbances in the identified nesting areas. DOE has also restricted any encroachment into known nesting  
21 areas by NPR-3 personnel.

22 Additionally, current management practices have established a buffer zone (controlled surface use)  
23 around raptor nest sites that considers topography and special status prey habitats surrounding the nest  
24 site. Raptor buffer zones around nests are ¼ to ½-mile in size for the period February 1 through July 31.  
25 The DOE has placed this more stringent policy to restrict and to control access to known nesting sites. All  
26 of the nests are located in very rough terrain and access to these locations has been restricted. There is no  
27 intent to develop these areas for production or testing.

28 All oilfield activities are reviewed for considerations related to these issues. Environmental evaluations  
29 are made prior to any transaction is enacted on the NPR-3 using the NEPA process to review long term  
30 and cumulative effects on migratory birds. This will include monitoring for threatened and endangered  
31 species. NPR-3 management personnel will comply with the regulations of the Migratory Bird Treaty Act  
32 (MBTA) and Bald and Golden Eagle Protect Act (BGEPA) in addition to the U.S. Fish and Wildlife  
33 Service .The conservation and monitoring of environmental issues is a continuing program activity at  
34 NPR-3.

**WYOMING DEPARTMENT OF AGRICULTURE (WYDOA) COMMENTS ON THE  
WATERLINE EA**

**General Comments**

Our comments are specific to our mission: to be dedicated to the promotion and enhancement of Wyoming's agriculture, natural resources, and quality of life. As this proposed project affects our agriculture industry, our natural resources, and the welfare of our citizens, it's important that we be kept informed of proposed actions and decisions and that we continue to be provided the opportunity to express pertinent issues and concerns. We would like to express our thanks for notifying our office of the availability of the draft Environmental Assessment and providing us opportunity to comment on the effect of this project on agriculture. We appreciate your cooperation in this effort.

**DOE Response:** DOE recognizes the role of the Wyoming Department of Agriculture Office in providing supervision and guidance regarding Wyoming's agriculture, natural resources, and quality of life. DOE is committed to continuing its relationship with WYDOA. As soon as decisions are finalized, either a Final EA and FONSI, or a determination that an EIS is needed will be posted on the RMOTC Web Site for review.

**Specific Comments:** Alternative A (the preferred alternative) is the most sensible alternative. In this alternative, a large portion of the pipeline construction occurs on NPR-3 land and occurs along existing road right-of-ways. Using existing road right-of-ways will decrease the amount of surface disturbance, thus reducing impacts to vegetation. The short term construction planned will also decrease impacts to livestock grazing in the area.

**DOE Response:** As suggested, we are considering placing the waterline on property that has been previously disturbed. For each alternative route, the areas under consideration have been surveyed for possible effects on the environment, biota, cultural impacts and wildlife impacts. Our final decision will take this information into account.

**Specific Comment:** We appreciate your commitment to reclamation of the project area following construction completion. Successful and timely reclamation, mitigation, and weed control are imperative in disturbed areas. This plan should fix standards for reclamation that are measureable, quantifiable, time-sensitive, and verifiable through monitoring. It is crucial that food and habitat for livestock and wildlife become available as soon as possible following pipeline construction.

**DOE Response:** DOE follows the reclamation techniques for Southwest Wyoming high desert sites published by the Wyoming Department of Environmental Quality, Land Quality Division.

**Specific Comment:** We strongly encourage your staff to continue to work closely and consistently with all affected agriculture producers to learn of their concerns and recommendations regarding this project. Agriculture producers are intimately familiar with areas affected by this proposal and they possess irreplaceable long-term, on-the-ground knowledge. They are particularly aware of the individual and cumulative impacts upon wildlife habitat and livestock forage, as well as rangeland health for the planning area.

**DOE Response:** It has been DOE's standard practice to work directly with agriculture producers regarding their concerns and recommendations. Specifically, DOE works with grazers utilizing this site and we notify adjacent landowners of pending major actions. In addition, DOE has consulted with local land owners in the recent preparation for a Range Management Survey of our facility.

1 **Specific Comments:** The Wyoming Department of Agriculture would like to be notified if the preferred  
2 alternative (Alternative A) is not chosen. In this situation, Bureau of Land Management lands may be  
3 crossed affecting grazing permittees and new roads may need to be built, increasing surface disturbance  
4 and forage for livestock and wildlife.

5 **DOE Response:** As soon as decisions are finalized, notification that, either a Final EA and FONSI, or a  
6 determination that an EIS is needed, will be posted on the RMOTC Web Site. If an alternative involving  
7 BLM land is pursued, DOE would work closely with BLM to minimize the extent of disturbance to  
8 grazing permittees, wildlife, and livestock.

**WYOMING STATE ENGINEER'S OFFICE**

**General Comments**

The State Engineer's Office appreciates the opportunity to comment on the above referenced project. The role of the Wyoming State Engineer's Office and Board of Control is to provide for the general supervision of the waters of the state, and of its appropriation, distribution, and application to beneficial use as provided under the prior appropriation doctrine. The EA describes three alternatives for a potable waterline that will be connected to the Central Wyoming Regional Water System (of which the Salt Creek Joint Powers Board is a member). Please be aware that if this EA proceeds and this project is initiated, an updated service area map will need to be submitted by the Central Wyoming Regional Water System to our ground water division. This map will need to show the expanded service area that would include the RMOTC's operations.

**DOE Response:** DOE recognizes the role of the Wyoming State Engineer's Office and the Board of Control in providing supervision and guidance over the waters of the state. DOE intends to provide the State Engineer with the maps and appropriate project engineering documents to advance this project. On completion of the Environmental Assessment, DOE intends to initiate a contract for services to an approved and state certified engineering firm for completion of the waterline project.

**General Comments**

The EA mentions that hydrostatic testing will need to be performed on the pipeline. To conduct this activity, a temporary water use application will need to be filed with our office.

**DOE Response:** DOE will comply with the State Engineer's request for the temporary water use application permit.

**WYOMING GAME AND FISH DEPARTMENT**

**General Comments**

The staff of the Wyoming Game and Fish Department has reviewed the Environmental Assessment for the proposed action of connecting the Rocky Mountain Oilfield Testing Center and Naval Petroleum Reserve No.3 to the Salt Creek Joint Powers Board potable water pipeline in Natrona County.

**DOE Response:** DOE recognizes the role of the Wyoming Department of Game and Fish in providing guidance regarding Wyoming's natural resources, and quality of life.

**Specific Comment**

**Terrestrial Considerations:** To minimize further disturbance of intact vegetation within the project area, we recommend choosing an alternative that maximizes use of existing water pipeline corridors. Regardless of which alternative is chosen, a weed Control and re-vegetation plan should be developed and implemented. As identified in the EA, cheatgrass is already established at various sites. We recommend utilizing herbicides or other means to control cheatgrass prior to final reclamation as this will enhance the opportunity for successful reclamation. We recommend consulting our local habitat biologist and/or the Natural Resource Conservation Service for an appropriate prescribed seed mix of native grasses, forbs and shrubs. We further recommend ongoing weed control after areas have been planted into final reclamation.

**DOE Response:** As suggested, DOE is considering placing the waterline on property that has been previously disturbed along with other alternative routes. For all alternative routes, the areas under consideration have been surveyed for possible effects on the environment, biota, cultural impacts and wildlife impacts. DOE will work with Wyoming Game and Fish and other organizations to determine the proper seed mix and weed control measures that would be appropriate for the selected route.